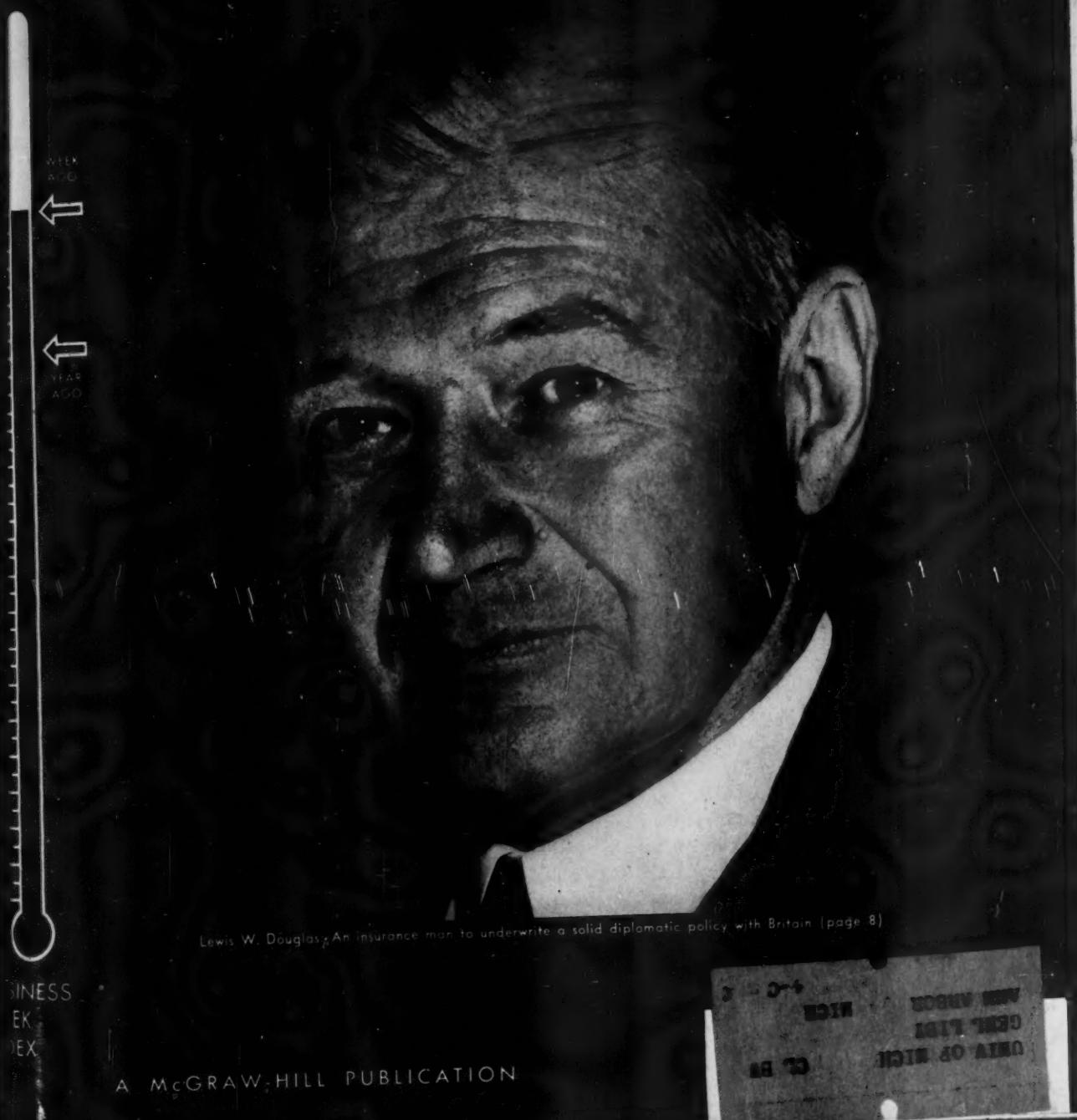


# BUSINESS WEEK

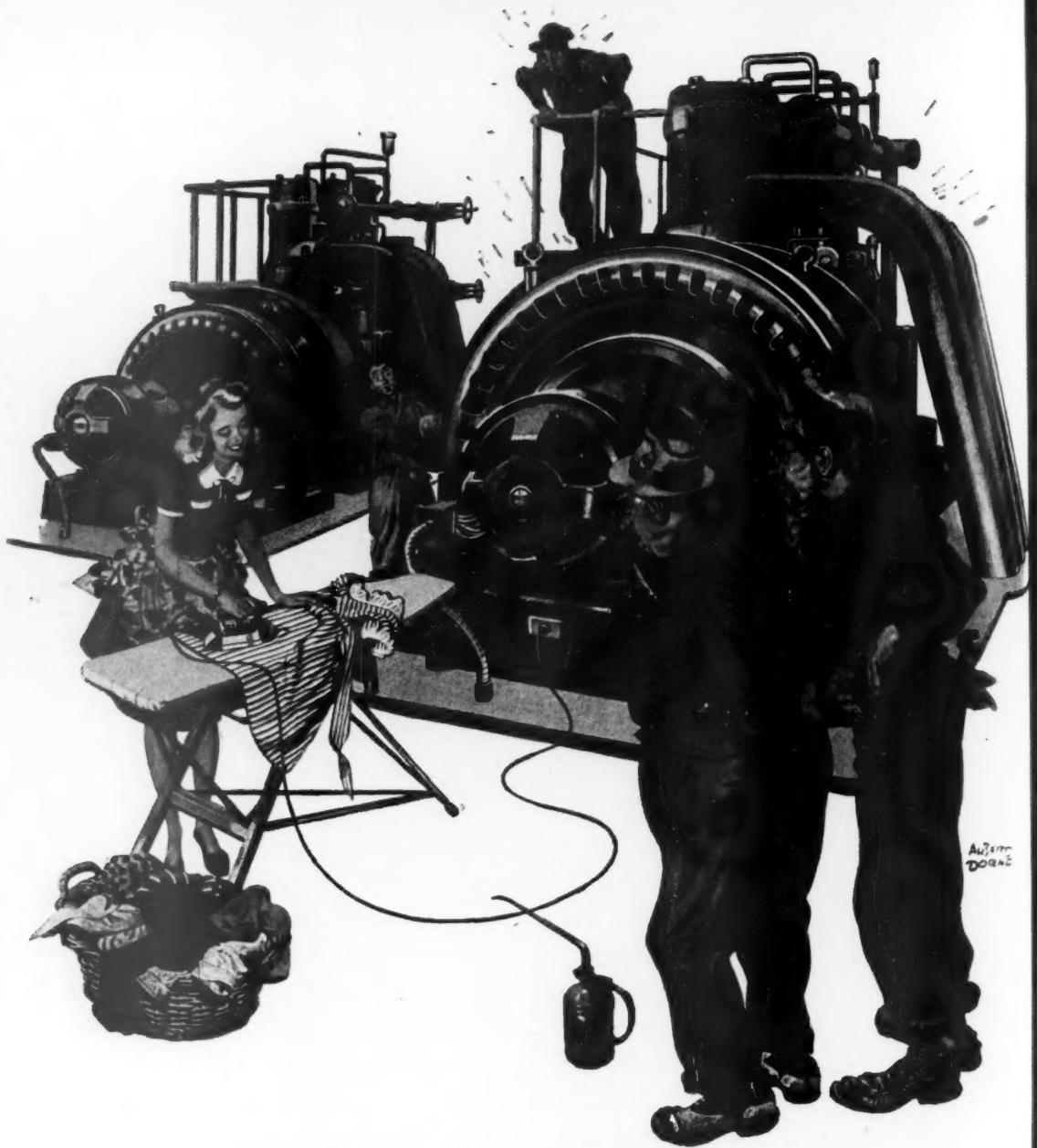
MAR. 8, 1947



BUSINESS WEEK EX

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BUSINESS WEEK • Mar. 8, 1947

# WASHINGTON OUTLOOK



BOTH CONGRESS AND TRUMAN are temporizing with the job Britain's economic exhaustion dumps onto this country (page 103).

The job: keeping capitalism afloat in the Mediterranean—and in Europe.

Neither the White House nor Capitol Hill is willing to pay the price—in terms of interference with the domestic economy.

Britain's piecemeal abandonment of its foreign commitments—to stall off economic collapse at home—will leave a vacuum in Europe and the Near East. It threatens to cancel the slow postwar climb toward stability.

Hardly a nation in that part of the world can stand alone. So, the question is: Shall the U. S. or the Soviets provide the prop?

It confronts the U. S. with these choices:

Pulling out behind Britain.

Propping Britain up with more money.

Stepping into the vacuum with an American political and economic program to replace that of the British.

Congress may vote a stopgap credit for Greece, if British troops stay, then make a pass at helping Turkey.

But that's about all you can see in the cards now. That much can get through Congress with the tag: Stop Communism.

Congressional tempers flare at bailing out the British. Congressmen fear equally the threat of Russia astride the Dardanelles. Right now, it's an impasse.

Taft looks for a way out that won't interfere with G.O.P. tax cut promises. Rep. Dirksen O.K.'s relief—food and medicine—but balks at rehabilitation.

It adds up to a lick and a promise. It stops short of replacing Britain as the dominant force supporting western capitalism in the "middle world" between the U. S. and Russia.

TRUMAN'S DRAFT DECISION was made before he got the British S.O.S. He let it stand, anyway.

So, the draft dies Mar. 31. The U. S. returns to an all-volunteer military strength limited to 707,000 Army, 571,000 Navy—"ceilings" that were set last year.

The notice is plain.

To Britain and the world: The U. S. won't add to its foreign commitments with men.

To Congress: Fixed boundaries on the amount of help to Britain.

You can expect, however, that the end of the draft will mean a stepped-up drive to get some kind of universal training. Chairman Gurney of the Senate armed services committee talks of a compromise on four or six months' service, instead of a year.

Most of those who favor the scheme, however, aren't even hopeful.

HERBERT HOOVER'S REPORT on Germany dramatizes the cost of occupying a beaten enemy.

It doesn't kite the check the U. S. already has to pick up.

Money for the things Hoover said are needed is already appropriated or in Truman's budget for fiscal '48—except for the immediate "extras" Hoover called for between now and July.

These may add up to \$25 million, on a bill which totals \$475 million.

So, Hoover's report serves as an expert's testimony in behalf of what's being done in the joint U. S.-British occupation area.

It pushes the urgency for continuance onto the front pages. At appropriation-voting time.

REORGANIZATION of the executive branch of government goes onto the G.O.P. agenda.

Young Sen. Lodge teamed with Clarence Brown, ranking G.O.P. member of House Rules, to get the ball rolling. They propose a commission to make an 18-month study, report to Congress in 1949.

Lodge sees his commission doing for the executive branch what the La Follette-Monroney act sought to do for Congress. He's been promised hearings on his project in a week or two.

Commission would be composed of congressmen, government officials, and outside experts. Lodge's choice for chairman is someone like Justice Owen J. Roberts, or Navy Secretary Forrestal.

UNION CONTRACTS now are immune for two years from attack under the Wagner Act by a competing union. Formerly the term was one year.

NLRB calls its new ruling in the Reed Roller Bit case (page 95) a contribution to labor stability.

But it shows again that the board is alert to the

# WASHINGTON OUTLOOK (Continued)

mood of Congress. There's been a string of modifications recently.

Such as allowing employers to:

Talk unionism with employees—sometimes, at least.

Fire workers who strike in violation of no-strike clauses, or to force recognition of a certified union's rival.

Refuse to bargain when a union itself doesn't bargain in good faith.

Don't be surprised if the House Labor Committee injects realism in union strike votes into its labor bill.

Objective: prohibit strike decision by workers until all bargaining and mediation efforts have failed. Vote then would be on management's "final" offer. Rejection would mean immediate walkout.

The idea comes from scattered industry witnesses. And it's part of the C.E.D. plan. Chairman Hartley is for it. He's talking it up among his committee.

Criticism of today's advance strike ballots: They're simply votes of confidence.

MILITARY PLANNERS got their way in the first skirmish over the so-called Army-Navy merger bill.

The Senate voted to let its armed services committee handle the measure, upholding Vandenberg's ruling over the protest of Chairman Aiken of Executive Expenditures.

Companion bill in the House went to Hoffmann's Executive Expenditures group without a fuss.

Business interest in this bill runs to its surprise section shifting industrial mobilization from Army & Navy Munitions Board to a new planning agency modeled after WPB (page 16).

The bill, as you know, isn't merger. It sets up a new defense secretary atop the present military pyramid, and makes AAF a third independent service branch. But all the brass say they're for it.

ARE FEDERAL RESERVE'S credit-control powers obsolete because of the national debt and government lending agencies?

Rep. Jesse Wolcott of Michigan asks the question. He concedes he has no ready-made answer. But he's curious.

So, he plans to lead his House Banking Committee through a broad inquiry into the techniques

for manipulating the supply and price of credit.

Hearings start next month. They may run along into next year.

Wolcott isn't gunning for Federal Reserve. He knows it's the \$260 billion of federal debt that cramps the board's style.

The debt gives Republicans and Democrats alike a vested interest in holding interest rates down. Debt/service, even at today's low rates, is \$5 billion lump in the budget.

And the big federal lending outfits, of course, pass out loans for their own programs which are unrelated—often in conflict—to credit control.

What Wolcott is looking for is a way around the stone wall which the debt problem presents.

Good guess: You'll hear a lot about funding big chunk of the debt.

SCIENCE FOUNDATION legislation, started through the mill this week, has a good chance.

Controversial patent feature of last year's Kefauver bill has been dropped.

It would have dedicated to the public discoveries made with government money. Backers of the policy will try to restore the section on the Senate floor. But they won't make a last-ditch fight.

They'd rather have the official G.O.P. bill than none.

U. S. MEMBERSHIP in the U. N. refugee organization will be O.K.'d by Congress—with a string attached, to make sure it doesn't let down U. S. immigration bars.

The G.O.P. thus carries on—in this first test—the bipartisan foreign political policy of last year.

Subscribing to I.R.O. comes easy. U. S. membership costs \$73 million, compared to \$130 million spent by the Army on displaced persons in the last year.

If you have an especially nasty local labor situation in your town, the House Labor Committee might drop in for an on-the-spot look around. A subcommittee visited Pittsburgh, where a C.I.O.-A.F.L. brewery feud has raged for months. Chairman Hartley has asked for \$40,000 to pay for more such trips. . . .

Senate Republicans want an additional office building for their expanding staffs. They've got a bill setting aside \$25,000 to pay for blueprints. . . .

Veterans: Your Army discharge now is your priority certificate for buying surplus property from WAA's special set-asides for your own use.



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## THE COVER

Lewis W. Douglas has started to London twice on high diplomatic missions.

The first time was at the beginning of the war when the late President Roosevelt asked him to head the U.S. lend-lease mission in Britain. Douglas got only as far as Washington. One day of briefing convinced him that the immediate problem at that moment was shipping. He promptly switched to the War Shipping Administration where he remained as deputy administrator until the stage was set for D-Day.

• **Versatile**—Douglas has been in Washington all of this week being briefed for his second mission. This time nothing is likely to prove more urgent than the job to which he is assigned. As ambassador to Great Britain, it will be his responsibility to keep Washington informed about British problems, policies, and plans at one of the most critical periods in the Empire's history.

The ambassadorial nominee (Senate approval of his appointment is assured, may come any day) is one of the most versatile of this country's business executives. He was elected president of the Mutual Life Insurance Co. in 1940.

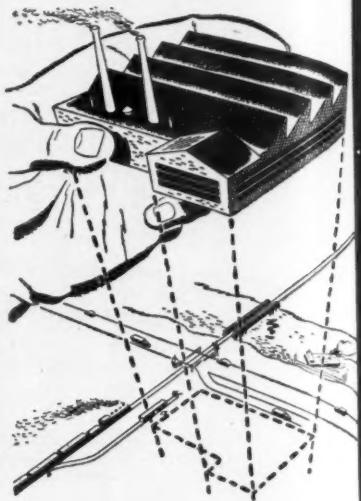
His grandfather was one of the founders of Arizona mining properties which are now a part of the Phelps Dodge Refining Corp., and Douglas, Ariz., is named for his family. Douglas was member of the Arizona Legislature in 1923-25, and represented his home state in Congress from 1927 to 1933. He still spends his holidays on his Arizona ranch.

• **Conservative?**—London's desperate fiscal problems will hardly baffle the new ambassador for he served as Director of the U. S. Budget for 18 months at the beginning of the first Roosevelt Administration. Because he resigned in protest of the New Deal pump-priming recovery program, his critics insist that he will report London's socialist policies through jaundiced eyes. His friends declare he is far more of a liberal than a conservative, and will interpret the moves of the Labor government from the point of view of an executive who has made a success of every job he has undertaken.

Outwardly, Douglas should find immediate approval among the present government leaders in London. He is thoroughly familiar with British problems through his intimate wartime contacts on WSA and his participation as adviser in the Quebec, Cairo, and Teheran conferences.

**The Pictures**—Keystone—Cover; Acme—15, 17, 19, 21, 100; Press Assn.—18, 19, 80; Int. News—19, 41, 88; Triangle—105, 106; Underwood-Stratton—63; Kaiden-Kazanjian—64; Blackstone Studios—72.

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BUSINESS WEEK • Mar. 8, 1947

# USINESS OUTLOOK

BUSINESS WEEK  
MARCH 8, 1947



Steel, in 1947, is going to be a problem just as it was in 1946 (Report to Executives; BW—Sep. 28'46, p71)—but not so much of a one.

Supply and demand—barring upsets—will come into balance in six to eight months. Best guess is balance toward the end of the third quarter.

Output of steel has been pushed above 94% of capacity against earlier expectations of operations in the 90% to 92% range.

It would be optimistic to expect the industry to get much beyond 95%. Some bessemer and electric furnace capacity can't readily be used.

Barring labor trouble or some other unexpected handicap, output can be held pretty much at present levels. But it won't be easy.

Scrap is tight and the freight car shortage—which may get worse—kept mills from shipping all the steel they turned out in January.

The car shortage may also impede scrap movement from remote areas.

Steel mills can pour out 85,000,000 tons of ingots and castings this year if operations aren't interrupted.

An operating rate of 95%, day in and day out, would yield 86,700,000 tons. But some allowance has to be made for holidays and hot weather.

Output of 85,000,000 ingot tons of steel isn't very far above earlier estimates. But there has been one important change. A ton of ingot now is yielding more finished steel than it did in times past.

The prewar rule of thumb was that 100 tons of ingots would give 71 tons of products; 29 tons of scrap would be generated in the process. Last year the product yield was raised to 73.7 tons. Late in the year, it topped 75 tons. The average for 1947 should be 75 to 76 tons.

On this basis, 85,000,000 tons of ingots mean 65,000,000 tons of finished steel—4,000,000 more than the prewar ratio would have indicated.

Production of 65,000,000 tons of finished steel should come very close to meeting demand.

It would top 1941's benchmark of 62,300,000 tons. In that year, 15% of the steel went to the military, so civilian users stand to get 11,000,000 tons or 20% more this year than in 1941 (allowing almost 1,000,000 tons for the military).

Peak industrial production this year will not be more than 15% to 18% above 1941. Of course, there is no straight relationship between industrial output and steel needs, but it gives a rough approximation.

Estimates of steel demand are hard to make. No one has all the figures. Few experts, however, put the 1947 total much above 65,000,000 tons.

You can make it come out a few million tons higher by (1) adding enough to meet all export demands, (2) assuming an end to restrictions on commercial and industrial construction, and (3) figuring enough steel for 6,500,000 cars and trucks which the auto industry would like to build if it could.

Needs would be less than 65,000,000 if the much-talked-of 10% to 15% decline in business activity were to take place later this year.

If production of finished steel this year does reach 65,000,000 tons, and if that matches demand, we still won't catch up any time soon. Inven-

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK  
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tories have to be built up, and especially need to be balanced, before steel really will have overtaken demand.

Most of the inventory building will come in the first half of this year. That's why supply-demand balance is still six to eight months off.

And even then we won't return to the buyers' markets of the thirties.

Exports will take up a good deal of slack. Light-gage flat-rolled products, enameling sheet, and tinplate will be scarce into 1948.

The break will come when finishing mills, now building, are ready.

Production of most durable goods will set peacetime records this year if industry has 65,000,000 tons of finished steel available. Autos and trucks should get enough for at least 5,250,000 units—just under 1929.

One way that autos could break the 1929 record of 5,350,000 cars and trucks would be to emphasize lighter cars. Most companies have been producing a high proportion of heavy cars, especially four-door sedans. This is partly due to the fact that purchasing power exists now, may not later.

But, even though industry may get enough steel in terms of tons, it still probably won't have all of everything in terms of products.

Efficiency in converting ingots into finished steel has one paradoxical result: The mills generate just that much less "home scrap."

In making 65,000,000 tons of products, instead of 61,000,000, from 85,000,000 tons of ingots this year, the industry loses 4,000,000 tons of scrap. Mills have either to buy that much more scrap or to use more pig iron (which would pinch buyers of merchant pig harder than ever).

One hopeful note on steel scrap is that the ship-breaking job is speeding up. This should now yield 40,000 tons a month; that compares with 33,000 tons in November and 15,000 last July.

Soaring scrap prices (though they may crimp steel mills' profits) also will set scrap peddlers to scouring the countryside.

Iron Age's scrap composite is up to \$33.75 a ton from \$19.17 a year ago. Many mills pay even higher on "deals" or to get remote scrap.

Labor will continue to hold the key to the steel situation—on prices and profits as well as on production.

Steel men today are optimistic. They think they can get an agreement on a moderate wage increase and can avoid strikes (BW—Mar. 1 '47, p15).

Shading of prices, if there is any this year, will be to woo big customers for years to come. Concessions, barring a business bump, will probably be out of "extras," leaving the basic price structure unchanged.

The steel industry's ace in the hole for increasing output in the future is the use of tonnage oxygen in making pig iron and steel.

Experiments are well along (BW—Sep. 7 '46, p16). Results are revolutionary. Blast furnace output might be increased one-fourth by using oxygen in place of air; openhearth production might be increased almost as much.

Now it becomes a matter of economics. Recent developments give hope of oxygen at \$8 a ton; the mills see prices ultimately under \$4.

This production stretcher may be the secret of why the industry has cold-shouldered Washington's urging of more basic capacity.

# FIGURES OF THE WEEK

	Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
THE INDEX (see chart below) . . . . .	*191.1	†190.6	191.3	158.5	162.2
<b>PRODUCTION</b>					
Steel ingot operations (% of capacity) . . . . .	94.4	94.4	93.6	76.7	97.3
Production of automobiles and trucks . . . . .	104,802	†103,400	94,114	17,575	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands) . . . . .	\$15,534	\$14,854	\$16,257	\$11,342	\$19,433
Electric power output (million kilowatt-hours) . . . . .	4,797	4,778	4,777	4,000	3,130
Crude oil (daily average, 1,000 bbls.) . . . . .	4,771	4,786	4,650	4,726	3,842
Bituminous coal (daily average, 1,000 tons) . . . . .	2,172	2,058	2,200	2,104	1,685
<b>TRADE</b>					
Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars) . . . . .	77	80	81	69	86
All other carloadings (daily average, 1,000 cars) . . . . .	53	53	56	51	52
Money in circulation (Wednesday series, millions) . . . . .	\$28,262	\$28,276	\$28,265	\$27,938	\$9,613
Department store sales (change from same week of preceding year) . . . . .	2%	†+17%	25%	20%	+17%
Business failures (Dun & Bradstreet, number) . . . . .	74	58	65	15	228
<b>PRICES (Average for the week)</b>					
Spot commodity index (Moody's, Dec. 31, 1931=100) . . . . .	415.9	406.4	382.8	271.1	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100) . . . . .	273.1	270.6	267.6	170.6	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100) . . . . .	337.5	326.3	305.8	237.5	146.6
Finished steel composite (Steel, ton) . . . . .	\$69.73	\$69.73	\$69.36	\$63.54	\$56.73
Scrap steel composite (Iron Age, ton) . . . . .	\$36.67	\$34.08	\$31.67	\$19.17	\$19.48
Copper (electrolytic, Connecticut Valley, lb.) . . . . .	19.954¢	19.630¢	19.617¢	12.000¢	12.022¢
Wheat (Kansas City, bu.) . . . . .	\$2.34	\$2.29	\$2.11	\$1.69	\$0.99
Sugar (raw, delivered New York, lb.) . . . . .	6.12¢	6.12¢	6.12¢	4.20¢	3.38¢
Cotton (middling, ten designated markets, lb.) . . . . .	34.12¢	33.99¢	32.09¢	26.78¢	13.94¢
Wool tops (New York, lb.) . . . . .	\$1.587	\$1.600	\$1.521	\$1.330	\$1.281
Rubber (ribbed smoked sheets, New York, lb.) . . . . .	25.75¢	25.75¢	25.75¢	22.50¢	22.16¢
<b>FINANCE</b>					
90 stocks, price index (Standard & Poor's Corp.) . . . . .	122.8	†123.8	125.1	136.5	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's) . . . . .	3.14%	3.13%	3.12%	2.94%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's) . . . . .	2.55%	2.55%	2.56%	2.48%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average) . . . . .	14-11%	14-11%	14-11%	1.00%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate) . . . . .	1%	1%	1%	1%	1-1%
<b>BANKING (Millions of dollars)</b>					
Demand deposits adjusted, reporting member banks . . . . .	38,686	38,758	39,902	37,610	23,876
Total loans and investments, reporting member banks . . . . .	55,056	55,116	55,805	68,148	28,191
Commercial and agricultural loans, reporting member banks . . . . .	10,712	10,648	10,499	7,382	6,296
Securities loans, reporting member banks . . . . .	2,056	2,084	2,138	4,865	940
U. S. gov't and gov't guaranteed obligations held, reporting member banks . . . . .	34,790	34,949	35,636	49,518	14,085
Other securities held, reporting member banks . . . . .	3,381	3,374	3,395	3,452	3,710
Excess reserves, all member banks (Wednesday series) . . . . .	690	610	700	1,039	5,290
Total federal reserve credit outstanding (Wednesday series) . . . . .	24,761	24,674	24,514	23,677	2,265

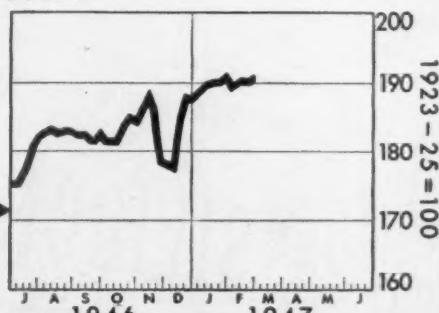
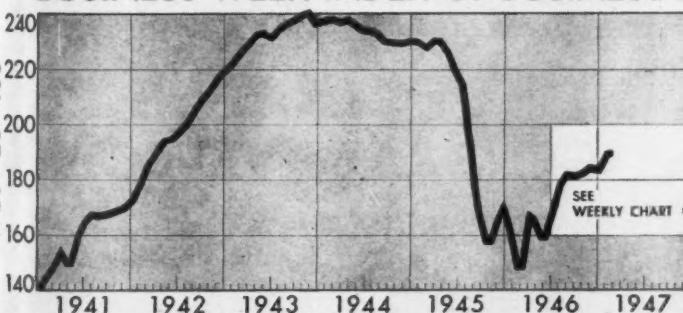
Preliminary, week ended March 1st.

† Revised

‡ Ceiling fixed by government.

\* Date for "Latest Week" on each series on request.

## BUSINESS WEEK INDEX OF BUSINESS ACTIVITY



## How does our new plant FIT INTO YOUR FUTURE?

Frankly, the answer is easy. Our new plant will make General Electric silicones—in quantity. But while we're getting ready to produce silicones, many manufacturers are thinking about how they are going to take advantage of these amazing products of chemistry in their own businesses.

What makes silicones so remarkable is the way they resist heat, cold, moisture, and weather. That's why silicone products promise to have important applications in many industries.

For example, General Electric has a silicone rubber that seems made to order for the aircraft of the future. It withstands temperatures as low as 55 degrees below and as high as 520 degrees F without losing its flexibility or elasticity. That's an important advantage for a

rubber part that must resist both the heat of an aircraft engine and the cold of the super-stratosphere.

Other silicone products offer exciting possibilities, too. Silicone oil will continue to flow at 120 below zero! Yet it won't ignite at temperatures as high as 570 degrees F. Silicone paints are likely to set new standards of resistance to the most punishing weather conditions. And thanks to silicones, baking enamels of the future promise to keep their sparkle and original colors indefinitely.

Then there's another result of silicone

research, called DRI-FILM\*—General Electric's new water-repellent material. We're expecting its moisture-resistant properties to find uses in protecting

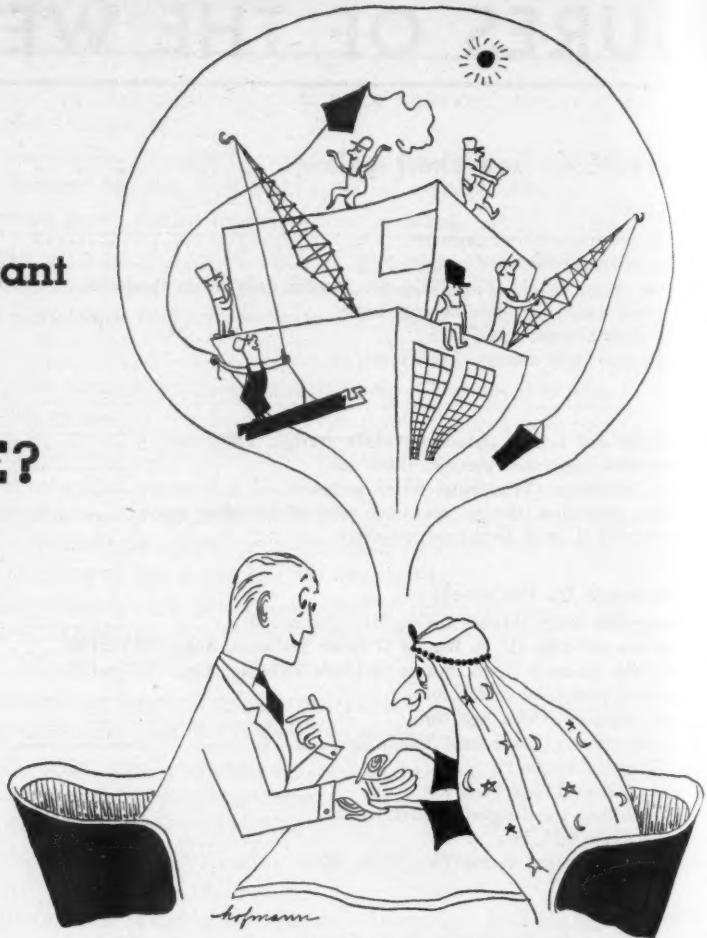
textiles, paper, plastics, glass, and ceramics. When will our new plant be ready to produce these products? Some time this summer. But you don't have to wait until then to learn more about them. For more details on silicone products write Resin and Insulation Materials Division, Chemical Department, General Electric Company, Schenectady 5, N.Y.

\*REG. U. S. PAT. OFF.



**GENERAL**  **ELECTRIC**

CD47-8



## Commodities Play a Lone Hand

**Inflationary boom in foods, raw materials not reflected by rest of nation's economy. Price rises caused by unique factors affecting individual commodities. Most will come down by fall.**

While Wall Street waltzed around listlessly last week, the commodity markets—after six weeks of working up to it—looked like a jitterbug contest.

Hogs were at or near \$30 a hundred-weight.

Wheat went scooting up 10¢ a bushel in a single session on the Chicago Board of Trade, now sells for about \$2.60. Copper jumped from 19½¢ to 21½¢ a lb. (page 46).

Silver, partially recouping earlier losses, hit 84½¢ an ounce.

In fact, just about everything coming out of a mine or off a farm was caught in a new price upsurge. Some prophets aimed to see visions of pork chops at a dollar a pound (retail) and began dusting off the word "inflation."

**The Contradictory Evidence**—Soberer minds, however, failed to go along with such ideas. There were too many contrary factors. Department store operators continued to talk about slipping sales and prices (BW—Feb. 15 '47, p15). The nightclub business—barometer of easy money—was developing queasiness. Stock prices were getting nowhere (page 10). In liquor and cigarettes, dealers talked about the future grumpily.

All in all, the commodity markets seem to have gone on a lone spree. The explanation is largely twofold:

(1) The current boom is indeed unique and can be traced, commodity by commodity, to special circumstances. (2) There appears to be no long-term strength to present prices. Future quotations (box, page 16) indicate that by fall the boom will have lost some of its bluster.

**Special Circumstances**—Pork is a spectacular example of how commodities become involved in special circumstances leading to remarkable prices. Last summer there was a feed scarcity, whereupon the Dept. of Agriculture urged reduction in hog numbers. Shortly thereafter, OPA lapsed for several weeks, causing sows to be brought to slaughter which otherwise would have crowded in fall (page 39). Ergo: a pork shortage and soaring prices.

In wheat, government buying has a part to do with present prices. Purchases for relief shipments—about 300,000,000 bushels—have resulted in a spot pinch. Cars on the Chicago Board of Trade

have been taking a beating in the March future; they would have needed something like 3,000,000 bushels to settle their contracts and there wasn't even a fraction of that amount available in the Windy City last week.

• **Short Crops**—Cotton prices reflect two successive small crops with demand at record levels. Mills, worried about getting enough good quality to last them through the season, are thus buoying the market.

Vegetable prices have gone up sharply since the Florida freeze.

In industrial raw materials, the world situation is kiting prices. Demand seems insatiable all over.

• **They'll Come Down**—But soaring prices eventually will be the instrument of their own destruction.

Present handsome hog prices, for instance, practically assure a spring crop larger than a year ago—which means more pork starting to market in October. There isn't any reliable forecast of what pork will sell for then, but larger hog marketings would bear down heavily on the price level.

Prospects for a big winter-wheat crop

are good. If weather is favorable from now to May, the country could have another bumper harvest. So July futures are about 40¢ a bu. under current prices.

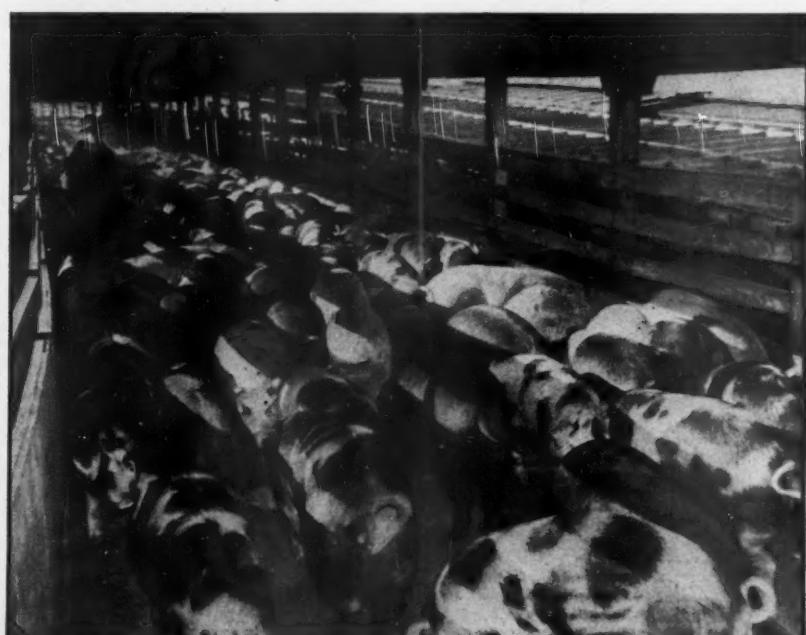
It's the same story in cotton. New-crop futures are 5¢ to 6¢ a lb. below the spot price (BW—Mar. 1 '47, p95).

• **Watch the Weather**—Thus, in a whole string of farm products, it's a case of shortage now and relative plenty later. As soon as marketplaces can be sure that crops are not going to suffer from bad weather—and barring just such a setback—prices can be expected to start down.

Of course, not all situations are so clear cut as those in agriculture. This is notably true of those industrial raw materials for which we must rely fairly heavily on imports.

• **Domestic Output Up**—But home production, even in the metals, has been rising since ceilings were removed. Domestic copper output under the OPA lid was running 75,000 tons a month or less. Now it is up to 80,000, and experts in the metal trades expect to see 90,000 tons before long.

Even at that rate, however, there won't be enough copper. Industry recently has appeared to want around 140,000 tons a month. That figure may include 20,000 tons of overbuying, but nobody really knows. Any way it is figured, though, there would seem to be a continuing need for imports of 25,000 to 50,000 tons a month, always barring



To market, to market to fetch a fat price.

## Scarcity Now, Relative Plenty Later

In that theoretical, nonexistent case of a "normal" commodity market, prices of futures would rise slightly the farther they are away. Thus September would sell higher than July by the cost of carrying the commodity the additional months.

These days, that is anything but the case. Speculators look for most things to be much more plentiful later this year than now. So distant futures, in most markets, are way under immediate-delivery levels.

Here are a few samples:

	January	Now	September Futures
Wheat (bu.)	\$2.06-\$2.18	\$2.59 $\frac{1}{2}$	\$2.09 $\frac{1}{2}$
Corn (bu.)	\$1.34	\$1.62	\$1.51 $\frac{1}{2}$
Cotton (lb.)	30.65¢	33.80¢	28.03¢*
Cocoa (lb.)	25¢	27 $\frac{1}{2}$ ¢	23 $\frac{1}{2}$ ¢
Hides (lb.)	22 $\frac{1}{2}$ ¢	25 $\frac{1}{2}$ ¢	21 $\frac{1}{2}$ ¢
Wool tops (lb.)	\$1.51 $\frac{1}{2}$	\$1.58	\$1.29 $\frac{1}{2}$
Oats (bu.)	82 $\frac{1}{2}$ ¢	94 $\frac{1}{2}$ ¢	71¢
Black pepper (lb.)	47¢	57¢	35¢
Lard (lb.)	26¢	31 $\frac{1}{2}$ ¢	24 $\frac{1}{2}$ ¢**

\* December. † May, 1948. \*\* November.

a decline in the level of business activity.

• **Rubber Poser**—Natural rubber poses its own problem. As long as the government imports whatever we use, allocates the supply, and fills the remaining needs with synthetic, there is no major price problem. But if controls come off, the industry expects every tire buyer in the country to demand one made of all natural rubber.

While supplies of natural crude are steadily rising, many in the trade are convinced that a scramble for rubber in the present world market would lead to a chaotic price situation.

• **Boom in Pepper**—And even black pepper, which brought 7¢ a lb. before the war, now is selling above 50¢ (BW—Nov. 30 '46, p30). But imports from the Netherlands Indies will knock that price down sometime soon. September futures can be bought for about 35¢.

## MACHINES EASIER TO GET

Purchasing agents are gleefully noting that light shop equipment—once scarce as diamonds—is now a little easier to come by. But heavy stuff is still hard to get. After informally comparing statistics, the purchasing agents more or less agree on the following timetable:

Type of Equipment	Availability	Year Ago	Today
Knee-type milling machines	10 weeks	1-3 weeks	
Lathes (manufacturing)	24 weeks	10-14 weeks	
Lathes (toolroom)	24 weeks	8 weeks	
Radial drills	10-15 weeks	3-6 weeks	
Sensitive drills	16-18 weeks	10-12 weeks	
Turret lathes	2-3 months	2-3 months	
Punch presses, shears, press brakes	10 months and up	10-12 months	
Mills and planers	12 months	12 months	
Conveyors	8-12 months	8-12 months	
Electric trucks	5-7 months	8-10 months	
Cranes	5-8 months	9-12 months	

## Peacetime WPB?

Truman's proposed civilian agency would coordinate military, industrial planning, set policies on critical materials.

A peacetime War Production Board—a civilian agency to prepare for the wartime mobilization of industry—is the hidden stinger in the Army-Navy merger legislation which President Truman sent to Congress this week.

Industrial mobilization planning has always been a job for the military, in peacetime. Comes war, civilians take over the industrial job and the advance plans are mostly pigeonholed. At present, industrial mobilization is the responsibility of the Joint Army-Navy Munitions Board, composed of representatives of the two services under a civilian chairman.

• **Purposes**—Truman's new plan would set up a civilian National Security Resources Board reporting directly to the President. It would take over the job of coordinating military, industrial, and civilian mobilization. The munitions board would be restricted to planning for the "military phases" of industrial mobilization. In wartime, presumably, the NSRB would be geared to expand into the roles filled last time by WPB, OPA, and the War Manpower Commission.

Immediate responsibilities of the NSRB would include policy-setting on the program for stockpiling of critical materials—a job now handled by the munitions board.

NSRB would also be charged with advising the President on "strategic re-

location of industries, services, government, and economic activities whose continuous operation is essential to the nation's security." The tremendous job of decentralizing industry into positions less vulnerable to atomic war is one which the munitions board had on its agenda.

• **Diverging Views**—Veterans of the military-vs-civilian battle for control of the economy in the war were startled to find a proposal like NSRB in the otherwise innocuous merger legislation. That battle, though it sometimes degenerated into personalities, was essentially a dispute between two conceptions of the organization of a war economy:

- The military view that the armed forces should take what they needed and let the civilian economy get along on what was left.
- The WPB view that the whole economy had to be planned and run as a single fighting unit of which the weapons were merely the cutting edge.

Unless congressional spokesmen force the military change the bill, or unless a weak appointment is made, the proposal represents a victory for the WPB type of thinking. Last fall, ex-WPBers who went through the mill with Donald Nelson were urging the President to create some such organization.

• **Direct to President**—Under Truman's proposal, the NSRB chairman would be a presidential appointee reporting directly to the White House. Other members would be "heads or representatives" of the executive departments and independent agencies.

Merger provisions of Truman's proposal would establish the Army, the Navy, and the Air Force as sub-cabinet departments with substantially their present organization. Over them would be a "defense establishment" headed by a cabinet officer to do a coordinating job. It would take over the present complex of joint boards and committees and would set over-all policy.

## Brake Fluid Standards

Motorists soon will be able to get hydraulic brake fluid to meet specific requirements, just as now they buy motor oil. The Society of Automotive Engineers, which set standards for motor oils and other automotive needs, has just defined standards for hydraulic brake fluid.

Two types are specified: one, a heavy-duty fluid for vehicles exposed to severe operating conditions; the other, a moderate-duty fluid with a narrower temperature range.

Uniform performance requirements are set up for boiling point, freezing point, rubber swelling, corrosion, stability, evaporation, and viscosity. Test procedures and test equipment to be used are specified.

# World Bank Goes Wall Street

Professional bankers, not diplomats, will set policy now. It rules out purely political loans. With McCloy as its president, damage to bank's credit rating may be repaired easily.

There is a long story behind the drasshakeup now going on in the management of the World Bank. And the story is this: If you want to borrow money, don't snub your bankers.

The Treasury and the State Dept. gave Wall Street a quick brushoff a couple of years ago when they hustled through their plans for the International Monetary Stabilization Fund and its companion, the International Bank for Reconstruction & Development.

Diplomats and Treasury experts handled all the negotiations at the Bretton Woods conference (BW-Jul. 29 '44, p. 17). When Congress finally approved U.S. participation, the same diplomats and Treasury experts strawbossed the setting up of the bank and fund.

**Surrender**—While all this was going on the big banks and investment houses had waited. A lot of water has gone under the dam since the days when Cleveland had to go to J. P. Morgan for help. But the money market can be a mulish thing, and there's a limit—even these days—to what the Treasury can make it do if the big banks don't go along.

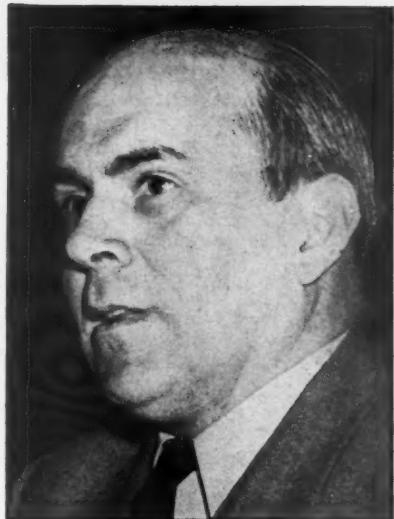
Within the past few months, the long disapproval treatment has begun to tell. The Treasury and State Dept. have surrendered control of half the Bretton Woods machinery. They run the affairs of the fund, but Wall Street is quietly taking over the rest.

No official will say all this in so many words, but the current shakeup

in the bank's management makes it perfectly plain. From here on, professional bankers, not professional diplomats, will set the policies for what is potentially the biggest lending institution in the world.

• **Trio From the Street**—So far, the reshuffle has brought three new men—all with Wall Street backgrounds—into the bank's top jobs. Additional changes up and down the line probably will follow as the new management puts down roots.

John J. McCloy, big-time corporation lawyer and former Assistant Secretary of



John J. McCloy

death of Harold Smith, former director of the government Budget Bureau.

• **"Calculated Risks"**—The three appointments put an all-Wall Street team in control of the bank. Translated into terms of lending policy, this means that the State Dept.'s plan to use bank loans as bait in its foreign policy will get a flat turndown.

Any loans that the bank makes will be based mainly on economic factors. It will not hand out money for purely political purposes, although no one will be surprised if countries such as France get a better deal than some of the Russian satellites, such as Poland. McCloy expects to take risks on his loans, but he intends that they shall be "calculated risks." He wants nothing to do with projects that offer no hope of repayment.

With Black as executive director, McCloy can make this sort of policy stick no matter what other countries have to say. The removal of Collado breaks the State Dept.'s hold on the bank entirely—which is why New York bankers insisted on it even though they like Collado personally.

• **No Choice**—All this, of course, is bitter brew for the State Dept. But there was no way to avoid swallowing it. By the time McCloy stated his terms for taking over as president, the only choice the bank had was to accept or to go out of business.

If it is going to make anything more than a few token loans, the bank will have to borrow money from American investors. And to float loans in the American money market, it must line up the big banks and financial houses behind it.

When Eugene Meyer was president, the bank commanded a fair amount of confidence on the strength of his reputation (BW-Nov. 2 '46, p. 17). Meyer resigned without giving an explanation,



Eugene Black

War, is taking over immediately as president. This spot has been vacant since last December when Eugene Meyer, the first president of the bank, suddenly handed in his resignation.

Eugene Black, vice-president of the Chase National Bank of New York and son of a famous Federal Reserve governor, will be the new U.S. executive director. This is a key job, because the U.S.—as the only real source of capital today—will dominate the bank. To put Black in, President Truman had to ask for a resignation from Emilio G. Collado, public service career man and former economic adviser in the State Dept., who had been the U.S. executive director since the bank was set up.

Robert L. Garner, financial vice-president of General Foods and former vice-president of New York City's Guaranty Trust, will be the bank's new vice-president. He takes the job left vacant by the



Robert L. Garner

but the word soon leaked out that he had tangled with the State Dept. over the question of loans for political purposes. That almost wrecked the bank's credit once for all.

• **On His Own Terms**—The only hope from then on was to get a prominent Wall Street man to take over as president. Half a dozen men—including McCloy—were approached and turned it down flat.

Meanwhile, the bank's borrowing prospects sank lower and lower. The executive directors got more and more desperate as each day went by. Finally, they went back to McCloy and asked him to look over the layout and name his terms.

• **Tune Changes**—As soon as McCloy accepted, the atmosphere warmed amazingly. Bankers all over the country came out with statements of satisfaction. The Dewey administration introduced a bill in the New York legislature to allow insurance companies to buy securities of the bank—a piece of key legislation that had been held up while the search for a president went its dreary rounds.

It looks now as though most of the damage to the bank's credit rating has been undone. If Wall Street continues to get its way, things may go a good deal smoother from here on. Meanwhile, bankers are keeping a watchful eye on the currency stabilization fund—and biding their time.

## Tariff Compromise

**G.O.P. pact with Clayton will give businessmen a chance to bring before the public any harmful effects on trade.**

Businessmen are to get a greater chance to be heard on effects of tariff cuts made under the Hull reciprocal trade program.

That is the really significant news in President Truman's executive order of Feb. 25 reorganizing the government's administrative machinery for handling this program.

• **Deal**—Politically, the order was issued to ratify a deal between Senators Arthur H. Vandenberg of Michigan and Eugene D. Millikin of Colorado—acting as G.O.P. Senate spokesmen—and Under Secretary of State Clayton, under whose aegis the trade program falls.

Vandenberg and Millikin promised that the Republican Congress would not interfere with the Administration's proposed 18-nation trade agreement negotiations, scheduled to begin in April at Geneva. In exchange, Clayton agreed to modification of the working procedures for handling tariff cuts.

• **Provides an "Out"**—Truman's order specifically does three major things:

(1) It stipulates that each reciprocal

trade agreement shall have an "escape clause" permitting the President to modify or withdraw tariff concessions made under the trade program if they prove harmful to domestic business.

(2) It empowers the Tariff Commission, an independent agency responsible to Congress, to inquire on its own initiative into the effects of any tariff cuts to advise the President, publicly, their effect on business.

(3) It provides that the government interdepartmental committee which compiles the basic information which U. S. negotiators base their concession talks with foreign representatives shall report directly to the President instead of to the State Dept.

• **Counting on Publicity**—Point two the modification of particular concessions to business.

In its inquiries into effects of tariff cuts, the Tariff Commission is directed to hold public hearings. Business interests, and others, may come before these hearings and tell their trouble that have resulted from a trade pact.

While the President is not bound to modify any tariff cut on the commission's recommendation, the fact that the recommendation is to be made public is expected to exert influence.

• **It's Long Enough**—This "truce" between the Administration and the Republican leaders doesn't satisfy all objects to the reciprocal trade program. For example, not Sen. Hugh Butler, Republican from Nebraska, nor Rep. Harold Knutson, chairman of the powerful House Ways & Means Committee.

It does, however, satisfy enough of the Republicans—and dissident Democrats—to assure that there will be a successful congressional revision of the trade treaty act during its present term on the law books, which is until June 1948. That's long enough to permit the Administration to complete its scheduled bargaining with the 18 nations.

Also, by that time, it is expected that the proposed International Trade Organization under U. N. will have been set up and ratification of its charter by the U. S. will be before the Senate.

## FOR HAPPIER TOURISTS

In Oregon, tourist travel is a major industry. Only lumbering and agriculture surpass it.

So that the state's businessmen may derive the greatest benefits from the trade, Oregon officials have recently launched a brace of tourist host schools. Here, Oregonians will be taught the economic importance of keeping tourists happy, and how to do it.

Oregon's Advertising Club, the state highway department, and a governor's tourist committee are sponsors of the project. Last year they conducted eight schools. This year they plan on 25.



### MANY WINGS FOR A NEW VENTURE

The new "commander" of a surplus air force surveys his 895-plane fleet at Fort Worth, Tex. Homer Snowden, Dallas oil man, paid War Assets Administration over \$100,000 for a fieldful of planes. Too good to scrap, they will be reconditioned—for an additional \$400,000—and resold, with Latin America a likely market. Meanwhile, another citizen-owner of an air force, Martin Wunderlich of Jefferson City, Mo. (BW—Aug. 24 '46, p15), reports that the job of melting down his 5,000 planes for scrap will start in a few weeks.

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NESS WEEK • Mar. 8, 1947

## STEEL UNIONISM: ANNIVERSARY AND CHALLENGE



June, 1936: The C.I.O.'s top command—Hillman, Lewis, Murray—set the stage for organizing steel.



First success, March, 1937: Myron Taylor, John Lewis negotiate a U.S. Steel contract without a strike.



Little Steel, Memorial Day, 1937: Fight for survival.



Today: America's biggest union—850,000 strong.



Its martyrs: Republic Steel dead.

On Mar. 2, ten years ago, C.I.O.'s Steel Workers Organizing Committee sunk a taproot deep into the American industrial earth. It signed a contract with United States Steel Corp., which had been, since 1919, the strongest bastion of the open-shop. From that beginning, and through a permutation from the S.W.O.C. to United Steelworkers of America, the steel union has grown to one of the greatest aggregations of labor power the world has ever seen. It now blankets better than 90% of the country's basic industry; is a large determinant of the business outlook; can exercise a powerful influence over profits, prices, and employment. Fostered by the psychology of a depression hangover and New Deal labor policies, steel unionism enters its second decade called upon to function in a new and harsher climate.



Its leader: Philip Murray.

## Rail Fare Plea

**Eastern roads ask higher coach and first-class tariffs. Increased operating costs and declining incomes are cited.**

Eastern railroads have asked the Interstate Commerce Commission to investigate passenger fares. They have requested, meantime, increases of 13.63% in coach tickets and 6.06% in parlor and sleeping car fares.

The request, if granted, would raise the per-mile tariff for coaches from 2.2¢ to 2.5¢ and first-class fares from 3.3¢

to 3.5¢. In addition, most of the roads asked varying increases in commutation and other multiple-ride tickets, some for 20% and others for specific amounts.

• **Net Income Down**—The railroad reasons for wanting an increase are the obvious ones. They report that labor and material costs last year were \$468-million over the 1945 figure. Wages, they say, are up 19.6% over 1945 and 46.9% over 1940, and fuel and other materials are up 20% over 1945. In addition, the roads claim that the Crosser act, which went into effect Jan. 1, will increase the rate of payroll taxes this year from 6 1/2% to 8 1/2% or about \$41-million.

In their petition, the railroads use

ICC figures to show that in 1946 "reported net operating incomes" in Eastern District declined by 49 over the previous year. By going "adjustments" of the 1946 expense accelerating amortization for debt projects, tax credits, and other non-carrying items, the roads show an 80% decline from the previous year.

• **Bus Lines to Wait**—The intercity lines, which might be expected to in line, indicate they will delay a probably several months. They are under an ICC investigation to determine if their present rates are too high. The bus strategy ultimately will be counter the commission investigating looking to lower fares with a request higher ones.

## CPA Views the Future Brightly—With Only a Few Ifs

Government economists are beginning to softpedal talk of a major business readjustment in 1947. The official line now is "qualified optimism"—with the emphasis on the optimism rather than on the qualifications.

The latest pronouncement on the subject is a special report, "Production Outlook—1947," by the Civilian Production Administration (now part of the Office of Emergency Controls). This is the most comprehensive—as well as the cheeriest—piece of crystal gazing that Washington has done on 1947 prospects. Because it branches out into general economics, it covers considerably more ground than the Dept. of Commerce predictions released earlier this year (BW—Jan. 18 '47, p17).

• **Too Bullish?**—The CPA study is considerably more bullish than the earlier report of the President's Council of Economic Advisers (BW—Dec. 21 '46, p5). To many economists, it will seem willfully bullish, because they consider nothing fundamental has happened since last December to make the outlook for 1947 any rosier.

As CPA sees it, the U. S. economy can follow one of two roads during the coming year. Under "Alternative A," production and employment would stay at about the present level or rise slightly; prices would stiffen moderately during the first half year and decline gently in the second half. Under "Alternative B," prices would climb sharply in the first half, then break; production would expand only slightly in the first half year; in the second half, it would start a "substantial" decline that would continue into 1948.

• **Conditions**—CPA is betting on "Alternative A"—the happier prospect. But it concedes that at least five conditions will have to be met if everything is to go off on schedule:

(1) There must be no further "significant" increase in prices.

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(4) Business investment in plant and equipment must stay at its present high level.

(5) There must be no serious labor trouble.

• **Other Forecasts**—All this may add up to a large order. But CPA assumes that the major conditions of its "Alternative A" will be met. On this basis, it goes on to make a series of specific predictions. Here are some of the more important ones:

Gross national product will total about \$202 billion for the year. Under "Alternative A," the rate will remain at its present level, \$210 billion through the first and second quarter, then decline slowly to a rate of about \$194 billion or a little less at the end of the year. Under "Alternative B," it would climb to a rate of \$220 billion, then fade out to \$180 billion at year-end.

Wages will increase in some instances this spring, probably averaging around 10%.

Price declines are practically certain for agricultural commodities, probable for textiles, apparel, and a few other lines.

Total construction will run \$20 billion to \$22 billion in 1947, against \$15 billion last year.

Building materials will be easier to

get. Clay and masonry products (bricks, tile, cement, etc.) will be in ample supply. Lumber will be sufficiently plentiful to meet requirements.

Steel product supply in total will come to about 61 million tons, 18% more than in 1946, but still not enough to supply all demands. If the yield from ingots improves, the product supply may be somewhat greater (page 9).

Copper supplies from domestic sources (page 46) will come to about 1,090,000 short tons, which compares with 1946 consumption of 1,240,000 tons.

Tin and lead will continue painfully short.

Aluminum demand will be about 2,300,000,000 lb. in 1947. Domestic supply will be about 1,700,000,000 lb.

Pulp, paper, and paperboard will continue tight until the second half of the year, then ease up.

Passenger car and truck production will hit 5 million.

Household appliances will be produced in great volume. Except in a few lines, such as sewing machines, supply will gradually come into balance with demand.

Men's suit production will continue to climb, but it is not likely to catch up with demand during the year.

Men's shirts probably will top 1946 supply by 15% to 20%, but the backlog of demand will not be cleaned up entirely.

Women's wear will be in fairly easy supply throughout the year.

Railway freight cars will continue short through 1947 in spite of increased carbuilding.

# What Is the Atom's Industrial Future?

First power plants seen operating in about five years. Radioactive isotopes, produced as byproducts, have many uses.

Man has always been a parasite of the sun. Our bodies run on solar power picked up by plants. Our industries sometimes use the mechanical device of falling water to tap sunpower. More often they run on the stored solar energy of coal and oil—stored by prehistoric plants which used radiation from the sun to pack chemical elements into stable arrangements. The energy is released when they rearrange into more stable forms.

**A Different Source**—On Dec. 2, 1942, we tapped an entirely new source of energy, independent of the sun. This was the energy stored, before the suns were formed, when subatomic particles were packed together to form two unstable heavy elements, uranium and thorium. On that day, physicists at the University of Chicago demonstrated that several tons of uranium, embedded with the proper spacing in several tons of graphite, would generate heat and continue to do so in a controllable, self-sustained process.

The applications of that discovery have already revolutionized one major industry—war—and have fundamentally changed the balance of international strength. Outside of those fields, it's true, most people are still inclined to act as though atomic energy were a private problem of statesmen, soldiers, and physicists.

**Effect on Industry**—But in recent months, alert industrialists have begun to realize that such a basic change, in an area that runs as close to the heart of every industry and technology as does fuel and power supply, is sure to have far-reaching effects. This is even more certain in view of the fact that exploitation of the new development has the full resources of the government behind it—to the tune, currently, of some half-billion dollars a year.

Today, no prudent businessman, no prudent engineer dares make plans or decisions reaching more than about five years into the future without at least weighing the possibility that the basis of his planning may be altered or upset by the commercialization of discoveries about the atom.

**Problems Posed**—One immediate effect of this realization is to add a lot of question marks to problems such as plant location, process design, raw material selection. From the technical side, firm answers to most questions on

## ATOMIC PROGRESS—I

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Just what are these potentialities? What are the facts that a businessman should know if he is to plan for a future which may be drastically affected by atomic developments in his field? To get the facts, Robert B. Colborn of Business Week's Washington Bureau has conferred with scientists, industrialists, atomic leaders.

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Among technical and businessmen

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## I. POWER GENERATION

Commercial production of electric power from atomic engines is only about five years away. That's the informed assumption today. Experimental production of power on a substantial scale will be under way within a couple of years in at least three places—Oak Ridge, Schenectady, and Chicago.

**• Question of Temperature**—Energy production from atomic piles, such as those at the Hanford (Wash.) plutonium plant, has been a fact for several years. But it's released by the pile in the form of heat. And so far, it has been produced at too low a temperature to be used for anything except to heat the Columbia River by several degrees.

The new power piles will be designed to operate at temperatures similar to those of a modern, high-pressure steam plant. Some fluid such as molten bismuth, sodium-potassium alloys, or others which can reach high temperatures without creating high pressures, will be heated in the pile; the hot metal will generate high-pressure steam in a heat exchanger to run more or less conventional generating equipment.

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Industrial boom, too?

## Rail Fare Plea

**Eastern roads ask higher coach and first-class tariffs. Increased operating costs and declining incomes are cited.**

Eastern railroads have asked the Interstate Commerce Commission to investigate passenger fares. They have requested, meantime, increases of 13.63% in coach tickets and 6.06% in parlor and sleeping car fares.

The request, if granted, would raise the per-mile tariff for coaches from 2.2¢ to 2.5¢ and first-class fares from 3.3¢

to 3.5¢. In addition, most of the roads asked varying increases in commutation and other multiple-ride tickets, some for 20% and others for specific amounts.

• **Net Income Down**—The railroad reasons for wanting an increase are the obvious ones. They report that labor and material costs last year were \$468-million over the 1945 figure. Wages, they say, are up 19.6% over 1945 and 46.9% over 1940, and fuel and other materials are up 20% over 1945. In addition, the roads claim that the Crosser act, which went into effect Jan. 1, will increase the rate of payroll taxes this year from 6 1/4% to 8 1/4% or about \$41-million.

In their petition, the railroads use

ICC figures to show that in 1946 "reported net operating incomes" in Eastern District declined by 49 over the previous year. By going "adjustments" of the 1946 expense accelerating amortization for debt projects, tax credits, and other non-curring items, the roads show an 80% decline from the previous year.

• **Bus Lines to Wait**—The intercity lines, which might be expected to be in line, indicate they will delay a probably several months. They are under an ICC investigation to determine if their present rates are too high. The bus strategy ultimately will be counter the commission investigation looking to lower fares with a request for higher ones.

## CPA Views the Future Brightly—With Only a Few Ifs

Government economists are beginning to softpedal talk of a major business readjustment in 1947. The official line now is "qualified optimism"—with the emphasis on the optimism rather than on the qualifications.

The latest pronouncement on the subject is a special report, "Production Outlook—1947," by the Civilian Production Administration (now part of the Office of Temporary Controls). This is the most comprehensive—as well as the cheeriest—piece of crystal gazing that Washington has done on 1947 prospects. Because it branches out into general economics, it covers considerably more ground than the Dept. of Commerce predictions released earlier this year (BW—Jan. 18'47, p.17).

• **Too Bullish?**—The CPA study considerably more bullish than earlier report of the President's Council of Economic Advisers (BW—Dec. 21'46, p.5). To many economists, it will seem willfully bullish because they consider nothing fundamental has happened since last December to make the outlook for 1947 any rosier.

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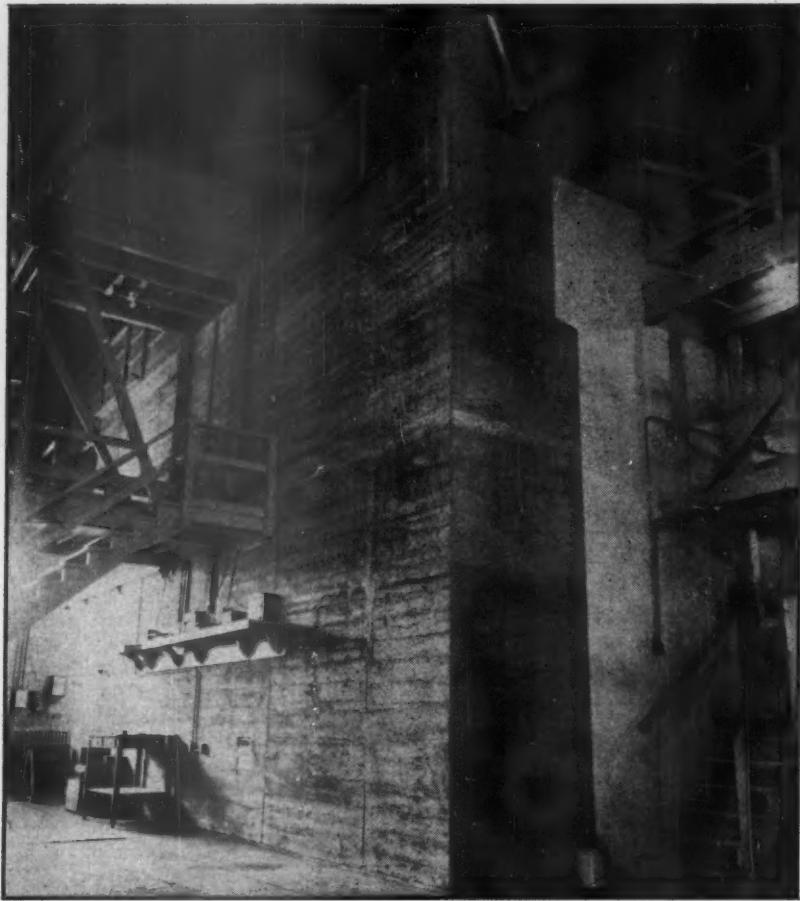
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HTLY  
UND



The world's first atomic pile, now located in suburban Chicago. It commenced operation at the University of Chicago's Stagg Field Dec. 2, 1942.

will run at high temperature and will incorporate a heat exchanger. And it's a safe bet that any of the future piles being planned—in the U.S., in Canada, in England—will be designed to utilize the energy produced.

• **Competitive Position**—Cost will not be an obstacle to the use of atom-fueled electricity. Only official word so far on cost is an estimate of 8 mills per kwh. It was submitted by R. C. Tolman, scientific adviser of the U. S. delegate to the international committee on control of atomic energy (BW—Sep. 14 '46, p. 18). This figure is some 30% higher than the cost of coal-generated power in areas where coal is plentiful. But it would make atomic power economical in any area where coal costs more than about \$10 a ton.

If, as now appears likely, Europe and England face permanent shortages of coal, then atomic power, even at 8 mills, could be a matter of economic life or death wherever no large blocks of hydro power are available.

A great many engineers and physicists in atom work are convinced, however, that this official figure is far too high, was deliberately made ultraconservative. They think they're working on a power

source which, right from the start, will be competitive on a cost basis with any other fuel.

• **Forecast**—There are highly respected scientists who predict privately that within 20 years substantially all central station power will be drawn from atomic sources.



Never underestimate the power of a woman: A twist of the dial crank at the lady's right controls the uranium chain reaction in the Argonne atomic pile.

If this prediction is even partly right, the effects on the coal and oil industries, the railroads, the industries using oil and coal as raw materials, and the industries tributary to all these groups are incalculable.

• **Complications**—A complicating factor in determining actual power cost is the question of byproducts. An operating pile always produces valuable radioactive materials. These could be an additional source of income (of course, the cost of the labor necessary to handle the fission products would have to be deducted). Another income source might be the use of the pile for experimental, metallurgical, or chemical purposes.

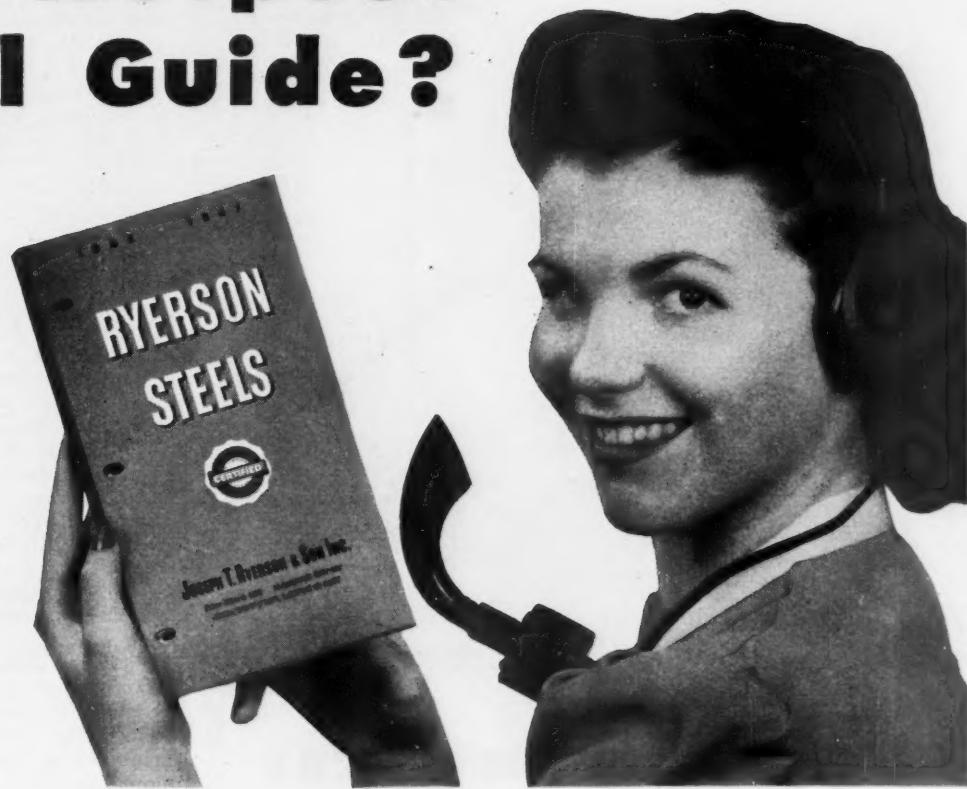
Thus, pricing of atomic power is likely to involve some of the complications encountered in distributing the costs of a multipurpose hydroelectric project, such as TVA.

• **No Lack of Ore**—Supply of atomic fuel does not appear to be any obstacle either. Uranium and thorium, the two known fuels, are rather plentiful. Known world resources of good ore are said to have sufficient power potential to meet the world's total power needs all by themselves for something like 20 years. And exploration for uranium has been intensive for only a few years. Extraction from low-grade sources—granite, shales, seawater—has hardly been studied at all.

Statistically, uranium is a fairly common element, scarcer than copper but more plentiful than tungsten, zinc, or lead. Thorium is about three times as plentiful as uranium.

Once the technical problems of building commercial power plants are worked out, installation where they're needed will probably be able to go forward rather rapidly if the international situation permits. The fissionable material now being manufactured and stockpiled for military purposes can, if it is

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the Ryerson Stock List to guide you, one call, one order, one shipment, will often cover a varied group of steel needs.

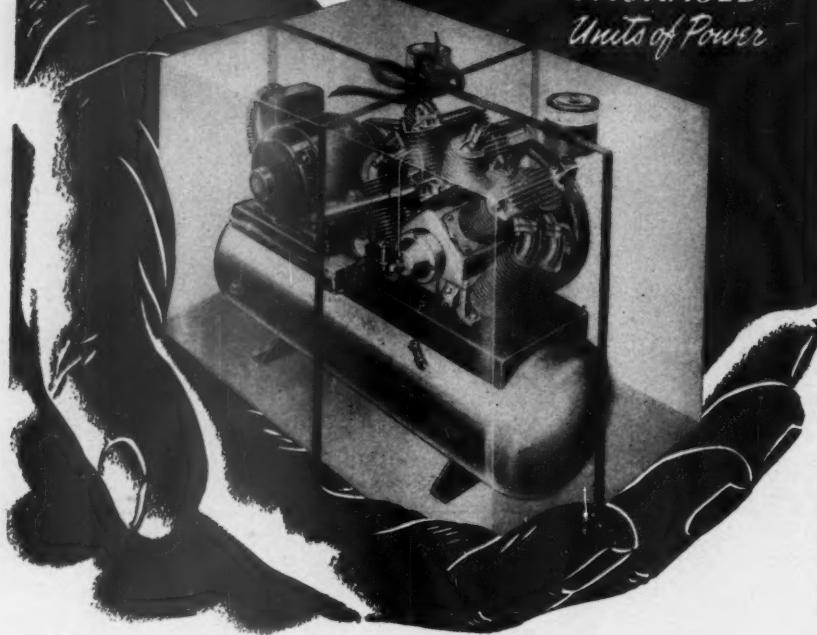
Copies of the current 1947 edition have been widely distributed, but if you do not have one, contact the Ryerson plant nearest you. And be sure to check Ryerson for all steel requirements. If the exact steel you need is not in stock our experienced staff will be glad to suggest a practical alternate.

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released, provide the initial material for power piles.

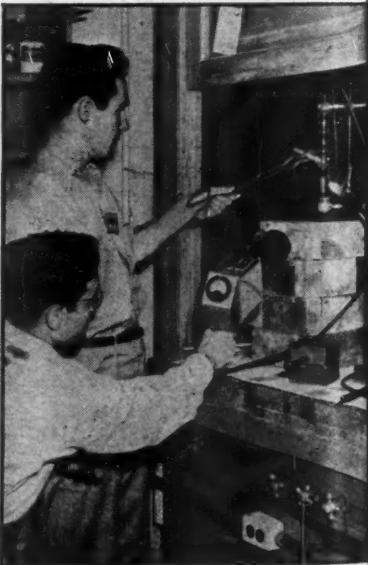
There are some other characteristics peculiar to atomic power, which seem the moment highly significant in assessing the industrial effects of commercialized atomic energy.

• **Limitations**—Atomic energy will probably be most suitable for central-station power installations. The necessity for shielding reactors and for disposing of fission products seems to rule out most uses of atomic engines in vehicles. Exceptions might include large naval vessels where an unlimited cruising radius is desirable; submarines, where the absence of air consumption would make indefinite submersion possible; and perhaps very long range or interplanetary rockets.

The central stations can be of two types: primary piles, similar to those at Hanford, and secondary reactors. Primary piles produce both heat (convertible into power) and secondary or "manufactured" fissionable materials, such as plutonium. Engineers talk in terms of 500,000 kw. or more for such primary reactors. Secondary reactors are units which use the secondary fissionable materials—probably in denatured form—as the source of energy. Potential output of such a reactor is perhaps 20,000 kw. to 100,000 kw. (BW-02-25-46, p24).

• **Variable Output**—Technically, the power output of any atomic device is extremely flexible, can be varied easily from a few watts to the level of a atomic bomb. Maximum output of a atomic power plant is limited only by the capacity of its heat-transfer system.

But from an economic standpoint, high load factor is imperative, because capital investment is by far the largest



Radioactivity of transmuted element is checked with Geiger counters



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DEFIED DEADPANS, with brains to match, have never had place in Bristol's business philosophy. *They're too costly.* For they take all the joy out of life, and most of the benefits out of business — by freezing any attempt at friendliness, and by putting the hex on the simplest transaction with

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# LIGHTNING STRIKES MILL fire follows...loss set at near \$4 million

C-O-TWO detects and kills fires in early stages



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*A gutted tower . . . crumbling walls . . . 400 idle workers . . . months to rebuild. The cost of insufficient defense against fire.*

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On the night of July 3, 1946, lightning struck the rear section of a building of a large textile mill. Before the fire department arrived, the whole structure was in flames. Despite later assistance of three fire departments from neighboring towns, flames spread and destroyed two plants and several warehouses. The next morning showed a total loss of \$3,800,000. Cause: inoperative and inadequate protection.

The C-O-Two Industrial Smoke Detecting and Fire Extinguishing System protects your plant 24 hours a day. The slightest thread of smoke in any protected space sets off an alarm and floods the space with a dry, sub-zero, heavier-than-air cloud of carbon dioxide gas. It sweeps around obstructions, penetrates narrow spaces and snuffs out every trace of fire. Machines, materials, records and electric apparatus are not harmed. Non-conducting, C-O-Two is safe to use on running electric motors and live wires.

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element of cost. Once a plant was fueled up, cost of fuel replenishment would be a minor factor.

• **Flexibility**—Most novel feature of an atomic power plant is that it is independent of transportation. Because its fuel input is measured in pounds rather than tons, it can be located wherever power is needed, no matter how inaccessible the spot.

Thus, it can have a profound effect on the geography of all power-consuming heavy industries. It might become economic, for instance, to refine aluminum near the bauxite deposits, rather than to transport bauxite to a good power supply, as is done today.

## II. TRANSMUTATION

It's as a power source that nuclear fission can be expected to have its immediate and massive economic effects. But it also opens the way to do things to matter, to change its character, in ways that were never possible before—or only on a minute laboratory scale. In the atomic pile, energies never before available can be turned loose on the structure of matter.

• **Alchemists' Dream**—One thing already obvious is that the old dream of transmutation of the elements is now an accomplished fact, and on a significant scale. Transmutation has been possible for years in the laboratory, using cyclotrons and other types of "guns" that shoot subatomic particles. But always before it's been on a scale too small to have industrial significance.

The biggest job of transmutation to date is the manufacture of fissionable material itself. One such material occurs in nature, the scarce  $^{235}$  form of uranium. By using the energies of fission of uranium  $^{235}$ , the common  $^{238}$  form of uranium is transmuted into the synthetic fissionable element, plutonium. Similarly, thorium, not readily fissionable, can be transmuted into a fissionable form of uranium ( $U_{233}$ ).

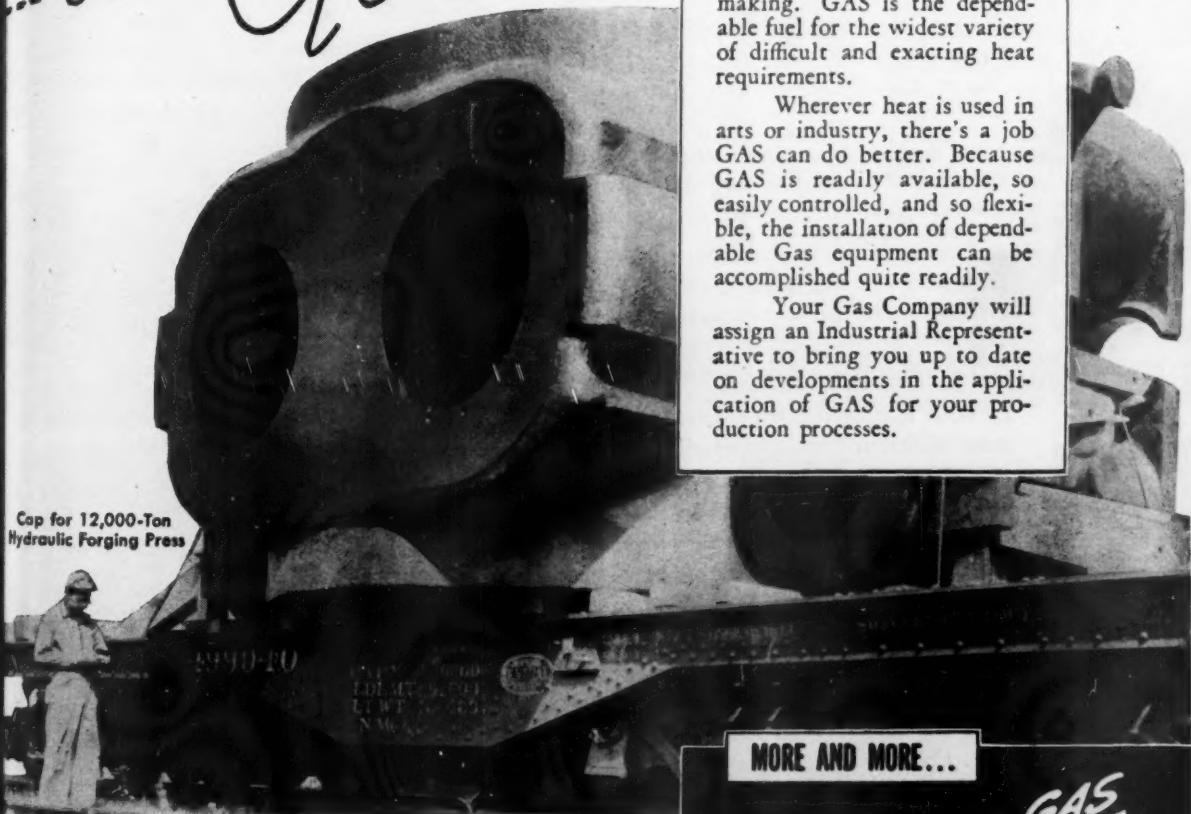
It's quite possible that in the future some of the now rare but important elements may be most easily obtained, not by prospecting for them, but by manufacturing them out of some other element.

• **New Tools**—Even more significant is the manufacture of radioactive isotopes of common elements. Most elements never occur in radioactive form in nature. But radioactive forms of nearly every element can be made in quantity in an atomic pile. They have exactly the same chemical properties as the natural elements. But they possess the additional property of emitting radioactive waves, just as radium does.

The research and medical value of radio-isotopes has been well publicized. But their potential usefulness in many industrial processes is not as widely

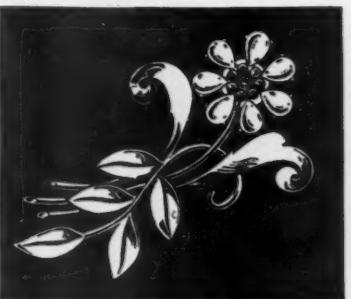
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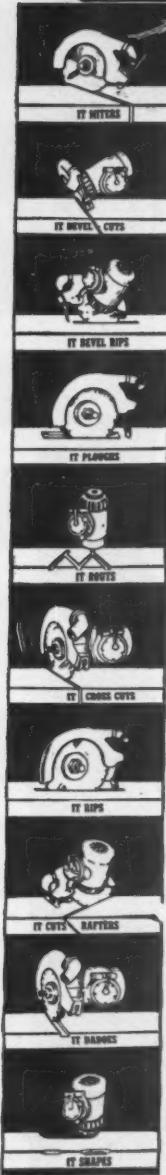
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realized. Two types of use are promising—as radiation sources and as tracers.

- **Radiation Uses**—As a source of penetrating, high-energy radiation, a package of radioactive material provides a comparatively inexpensive way of doing many inspection and other jobs that now call for bulky X-ray apparatus.

A cheap and convenient source of radiation may also have revolutionary uses in the chemical industries. In many chemical reactions, radiation has a catalytic effect, permitting reactions at low temperatures which otherwise would occur only at high temperatures or not at all. This effect has been little studied except in photography. But several oil companies are now investigating its application to the cracking of petroleum.

Even such prosaic uses as sterilization of sewage and ionization of the air around a moving belt to dissipate static charges are being seriously considered.

- **Tracer Uses**—Radioactive isotopes get their value as tracers from the fact that even microscopic quantities can easily be detected by their radiation. That is, the radioactive waves which they emit can be easily recorded on instruments.

The ability to identify a particular bit of material has great research value in such a problem, say, as studying the exchange of metal between the two surfaces of a bearing.

A bit of radioactive copper included in the bronze of some inaccessible bearing would make it possible to detect wear in the bearing by a radiation check of the lubricating oil.

Cavitation (vacuum formation) around turbine blades might be detected in the same way.

Proportions of alloying materials could be checked without the need for a chemical analysis.

The possibilities are endless.

Production of radio-isotopes is still so small as to limit their use to laboratories. But they'll be available to industry within a year or two. Any wide use of power piles would make radio-isotopes a routine industrial tool.

- **Effect on Crystal Structure**—There is still another possible application of atomic energy to the field of metallurgy. The crystalline structure of materials has been found to change markedly when they are subjected to bombardment from neutrons in an atomic pile.

Since the physical properties of most metals depend on their crystal structure, many investigators think that neutron bombardment could be used as a new form of "heat treatment," producing properties not obtainable by the conventional annealing and tempering.

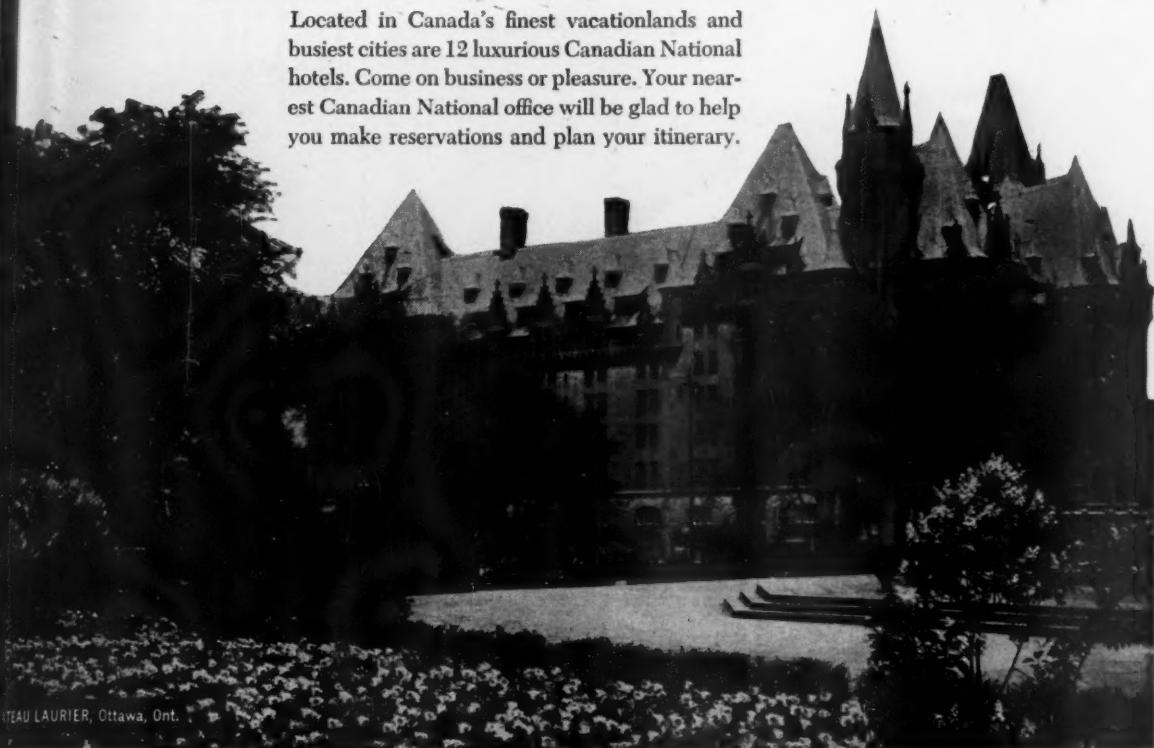
### III. THE FUTURE

As now conceived, atomic energy merely substitutes an atomic pile for a conventional steam plant in developing

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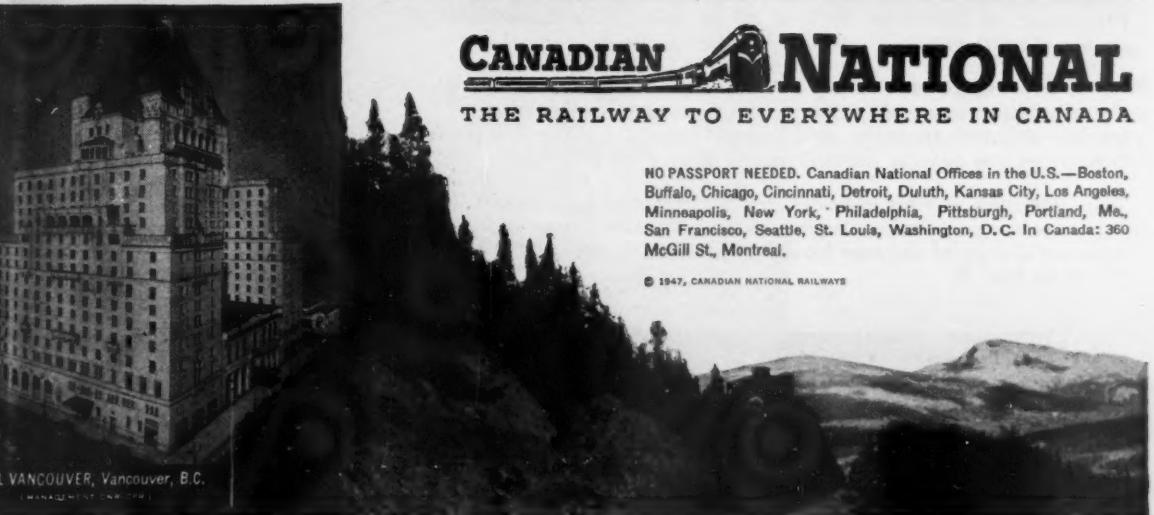
JASPER PARK LODGE, Jasper National Park, Alta.



THE NOVA SCOTIAN, Halifax, N.S.



MINAKI LODGE, Minaki, Ont.

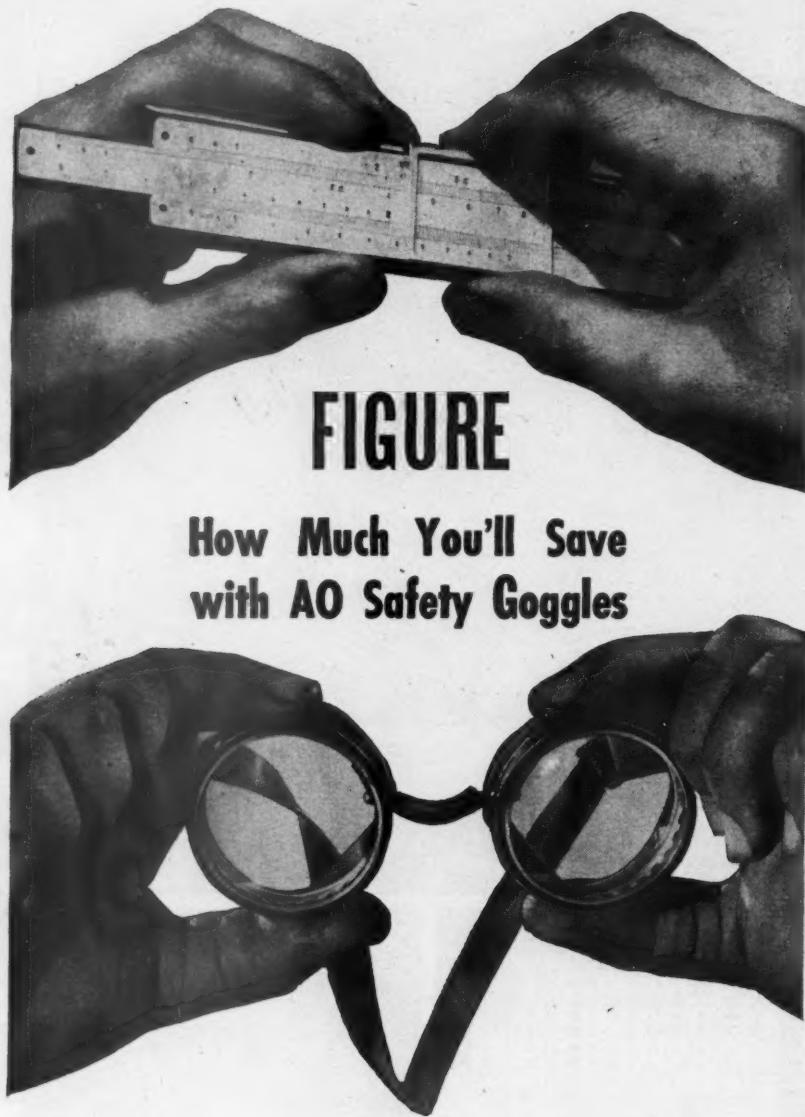


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## FIGURE How Much You'll Save with AO Safety Goggles



Typical records show that even the slightest of eye injuries costs approximately \$15.00 (in lost time, idle machine time, medical attention, etc.). Yet, according to the Society for the Prevention of Blindness, 98% of all eye injuries can be prevented by the use of safety goggles.

AO Safety Goggles are saving sums like these: a manufacturer of electrical equipment—\$14,000 in two years; a large machinery maker—\$44,000 annually. And in most instances entire eye protection programs pay for themselves in six months to a year.

Why not look at your own eye injury costs, and figure what an adequate eye-protection program would save. As a help in figuring send for a copy of the new booklet "Eye Accident Costs." Write to Box B.

American Optical  
COMPANY  
Safety Division  
SOUTH BRIDGE, MASSACHUSETTS  
BRANCHES IN PRINCIPAL CITIES

the heat required to generate power. But atomic energy itself is an electrical force. Some day a means may be found to harness this force directly, instead of using it to generate heat which must be reconverted into power. Today this thought is little more than a dream in researchers' eyes—but so was atomic fission a decade ago.

In the offing is the possibility that the tool of uranium fission may lead to other energy-releasing nuclear changes. In theory, there are many such changes. The stable elements are those of middle weight in the neighborhood of iron; when heavy elements break down toward this middle level or when lighter elements combine to form middle weight ones, energy should be released.

• **Hydrogen Research**—It is known that

promising research is already under way on energy from hydrogen.

When atoms of hydrogen combine to form helium, much more energy is freed than by the

fission of the same quantity of uranium.

The energy of the sun, itself, is believed

to come from this combination.

Standard theory is that the hydrogen-to-helium transmutation can occur at temperatures such as those in the sun—millions of degrees. If this is correct, it would seem that a chain reaction generating heat at this temperature faster than it could be dissipated, could only be maintained in a body some

where near the size of the sun.

• **Superbomb?**—Thus hydrogen

looks promising as a controlled power source.

But the announcement of

search on hydrogen is widely taken to mean that a uranium bomb could be used to produce a flash of sun-scale temper-

ature that would set off an atom

reaction in a quantity of hydrogen—per-

haps resulting in a bomb a hundred

or a thousand times as powerful as the

outmoded plutonium affair of World War II.

### SKF DECENTRALIZES

SKF Industries, Inc., is joining the growing trend toward industrial decentralization. Finding itself in a spot where further physical expansion of its plant facilities at Philadelphia is impractical, the firm is readying factories at Shippensburg, Pa., and Hornell, N. Y.

William L. Batt, SKF president and former WPB chairman, says the moves will result in a 50% increase in output of spherical roller bearings. He expects occupancy by July 1.

The Shippensburg site, formerly occupied by a furniture manufacturer who became a wartime casualty, will house the stamping department from which parts will be shipped to Philadelphia. The Hornell plant was bought by a company which changed its name and never occupied it. The cast-iron department will locate there.

# It handles every accounting job for this company with 60 employees!



In just a matter of seconds this Multiple-Duty National Accounting Machine changes from one type of work to another. The removable form bars, which make this possible, simply lift out and snap in—no screws, catches, or fittings to fumble with.



In great batteries, this same National Accounting Machine serves many of the country's largest banks and industries.

One of the most enthusiastic National users to be found anywhere is a manufacturer employing about 60 people in his office and factory, and having a daily posting of accounts receivable of only about 40.

While no one, or two, or even three, of his accounting jobs would have justified machine operation, yet his National Multiple-Duty Type-writing-Bookkeeping Machine is so flexible that, *single-handed*, it handles his *entire* accounting! It produces his accounts receivable; accounts payable distribution and general ledger; payroll—both checks and cash; stock records—on order and on hand; salesmen's commission accounts; and sales distribution by products and by salesmen—all accurate, all balanced, all up to the minute at any moment!

Prior to his use of the National machine, two of these jobs—stock records, and sales distribution—were not available at all. And the others meant endless work, with all of the usual duplications, triplications, month-end peaks, and laborious searches for differences.

If you employ from about 50 people up, let your local National representative show you exactly how the right National accounting system can save you time and money, while giving you better control of your own business. Or write to The National Cash Register Company, Dayton 9, Ohio. Offices in principal cities.

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CASH REGISTERS • ADDING MACHINES  
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Making business easier  
for the American businessman

**BETTER LIVING  
MAKES  
BETTER BUSINESS**



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Offers Industry**

TO THE MAN who is thinking of establishing an industry in the South, Pensacola offers an outstanding advantage . . . fine living conditions for employer and employees . . . an opportunity to enjoy life while making a living.



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for Successful Industry**



Pensacola is ideally located "at the top of the Gulf, in the heart of the South." It has a deep water port with excellent dock facilities; two railroads; intracoastal waterway; good plant sites; pure water supply; electric power, and gas; nearby resources of many kinds; nearby markets; American labor. On your trip South, visit Pensacola and see for yourself. For booklet and special information, write

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IN THE HEART OF THE SOUTH

## Tools Unlimited

Four measures to speed disposal of war surplus get industry backing. Government agrees to speed program.

The government now seems convinced that industry can't absorb all of the \$1,500,000,000 of surplus machine tools still on hand. And the machine-tool industry feels that what can't be sold, given away, or put into a military reserve, should be junked.

• **Deliveries on Schedule**—With industrial reconversion nearing completion, industry's need of surplus machines is rapidly diminishing. The tool industry can now deliver new equipment in most categories on normal schedule. It regards the still overhanging war surplus as a threat to future business. The War Assets Administration's surplus sales are becoming more and more costly.

WAA and the Army-Navy Munitions Board have now agreed with the industry that a new, vigorous disposal program should be set up, certainly by July 1. The objective would be to wind

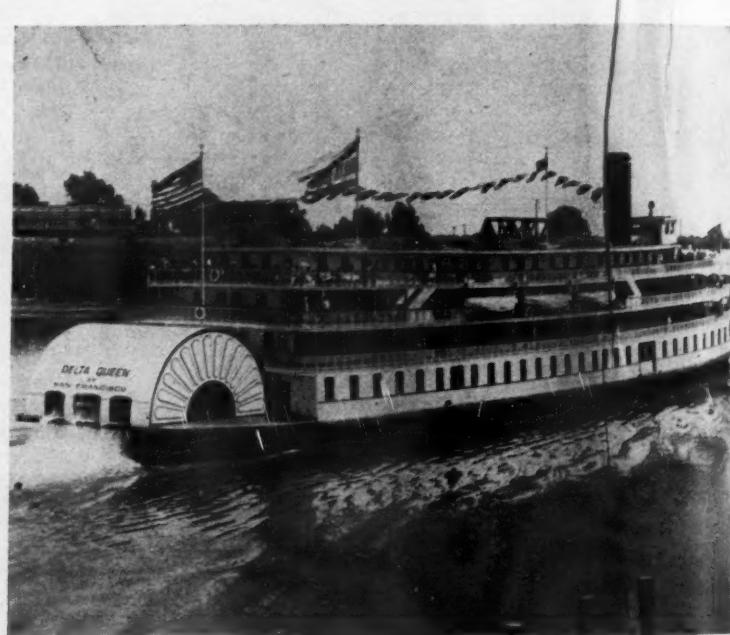
up disposal operations inside of a months.

• **For Sale to Operators**—Among measures to be proposed by the tool builders will be release of the Reconstruction Corp. from its obligation to or rent the \$600 million worth of it owns to operators of government-owned plants at 1% of value per month. These tools are part of the surplus threat and the Machine Tool Builders Assn. wants RFC empowered to sell them to WAA for sale to the operators.

• **For Defense**—A second hope for substantial disposal is to the military to serve. A team of government inspectors is in the field, selecting machine tools for inclusion in a standby of 40,000 units.

Proposed legislation would permit transfer of such tools without payment in cash. Additional legislation is under study which would stockpile 100,000 to 200,000 machines in long supply to proposed custodian, probably the Treasury, to be drawn on in emergency.

• **For Education**—A third proposal would be an organized effort to give machine tools, perhaps for \$1 each, to educational institutions. An unwieldy and complicated donation program has been in effect for some time but without much



### LIFE PICKS UP ON THE MISSISSIPPI

Big and fast, the luxury packet Delta Queen is preening for high-gear civilian service on the Mississippi. River men regard purchase of the ship by Cincinnati's Greene River Line as another indication of a big river revival. Built in Scotland just before the war, the \$1 million, 2,000-hp. boat saw war service transporting troops in San Francisco Bay. Soon it will start the 40-day \$35,000 tow through Panama Canal to New Orleans. It will start work as a 300-passenger pleasure craft in 1948.

# Black flour



These three factors are the unwritten plus-values in every C-E contract —

**Knowledge** — to solve today's, and tomorrow's, steam generating problems.

**Experience** — to interpret, from a world-wide background in every important industry, the specific needs of each installation.

**Facilities** — to manufacture complete steam generating units for every requirement, from 30 boiler horse power up to the largest.



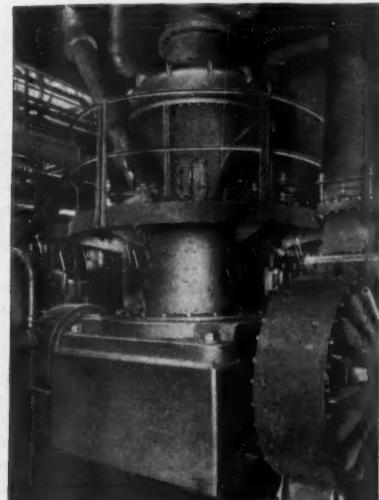
A MAN once looked at this substance and asked, "What is it, black flour?" Actually he was looking at coal . . . ground to about the fineness of flour — pulverized coal.

That was nearly 30 years ago when C-E engineers first demonstrated that powdered coal, as it was then called, was a practical and highly advantageous fuel for firing boilers. Today it is the generally accepted method of firing large power station boilers and is widely used for boilers in the middle-size range.

But pulverized coal firing proved to be something more than just an improved method of burning coal. It opened the way to other important developments such as the water-cooled furnace, the use of pre-heated combustion air and the designing of boilers far larger than had been considered practicable. In all of these developments Combustion Engineering had a major part.

The total contribution of pulverized coal firing to the national economy cannot be accurately calculated, but it is conservative to say that in coal savings alone it amounts to millions of tons annually.

B-122



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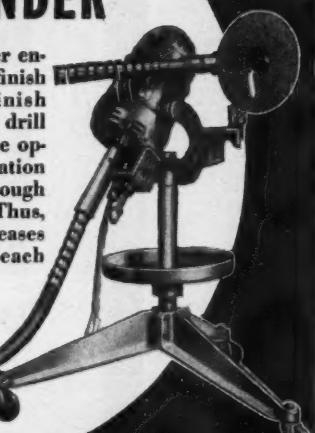
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- NATIONAL STOCK YARDS, ILL. North American Cold Storage
- SPRINGFIELD, MO. Springfield Ice & Refrigerating Co.
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A Mall Flexible Shaft Grinder enables workmen to clean and finish metals, sharpen tools, refinish automobiles, rasp tires and drill faster... easier. It relieves the operator of the weight and vibration of its high speed motor through the use of flexible shafting. Thus, at the same time that it increases the productive capacity of each man, it also substantially reduces his fatigue.

Mall Portable Power Tools are used to advantage in industry, construction, the home workshop, and on the farm. Write today for Catalog.



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result. WAA has been criticized for not untangling a maze of priorities and conditions and for not pushing its give-away deal. Schools have shown little interest to date.

The tool builders argue that thousands of vocational schools, high schools and colleges, might be glad to have the equipment if its advantages were properly presented. If WAA doesn't press donations to schools, the machine-tool industry itself may promote the plan.

• **For Export**—A fourth avenue of disposal is exports, but this would move only a small volume. Countries that need equipment have little money and would have to borrow from the U. S.

Moreover, manufacturers would insist that exported machines be reconditioned, because they don't want their reputations damaged by faulty tools.

• **Output Catches Up**—WAA has now in inventory machines that cost \$1,100,000. Nobody knows the exact number—there may be 300,000. It expects federal agencies to declare surplus about 125,000 more units that cost about \$500 million—over a billion and a half in all. Up to now, WAA has sold 120,000 pieces that cost \$480 million. So, of a round total of \$2 billion in war surplus tools, only about one-quarter has been disposed of to date. (The present annual rate of production—around \$325 million—is approaching the over-all disposal figure.)

Inevitably, a substantial proportion of the surplus is bound to end up in scrap. When that happens the government will look back wistfully to the prices it could get if many of these tools were scrapped now.

### FERTILIZER OUTPUT CUT

The Army is shutting down five of the 17 surplus ammunition plants in which it has been manufacturing fertilizer (BW-Jan. 11 '47, p22). As a result, monthly capacity of the over-all project will drop from 29,000 tons (on a nitrogen-content basis) to 21,000.

Reason for the curtailment is a shortage of specially equipped railroad tank cars. Many government-owned cars of the required types were used during the war in ammunition production. Subsequently most of them were leased to private industry. A War Dept. request for permission to recapture them was turned down last week by the Office of War Mobilization & Reconversion.

The five plants being shut down are: the ammonia plant at Louisiana, Mo.; solution plants at Dana, Ind., and Kingsport, Tenn.; and graining plants at Grand Island, Neb., and Milan, Tenn.

American farmers won't be hurt by the decision. Full impact will be felt by the occupied areas in Germany and Japan, for which the Army program was planned.

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Soot...



can spoil a *sale*, too!



EVER have a clean shirt become dirty during a 30-minute trip to the office? Who hasn't, and the cause was probably airborne particles of smoke and soot. And the cause of this minor irritation may be the source of a major problem in your business.

For example, smoke carbon was a trouble maker in this cotton textile weaving plant. Just a few particles of greasy smoke settling on the yarn results in an inferior fabric because it produces off-color whites and reduces brilliancy of color. But this plant, although located in an industrial area, has no problem now because all air entering the working areas is super-clean, having been filtered electrostatically by an AAF Electro-Matic Precipitator.

Whether you are a merchant or manufacturer, dust, soot and smoke can cost you big money. Clean air reduces soiling of merchandise, prolongs machinery life, contributes to the accuracy or purity of a product and protects health of customers and employees.

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A POST CARD WILL BRING YOU "NOTES AND QUOTES", A MONTHLY DIGEST OF NEWS ON EMPLOYEE RELATIONS.

## Wages and Sales

Sirs:

Business Week recently carried a very interesting tabular representation of the percentage changes in weekly and hourly earnings that occurred between January, 1946, and August, 1946 [BW-Nov. 9 '46p88].

Of particular interest was the last column headed "Wage Bill as Percentage of Total Sales," which I am desirous of reproducing, in part, in a subsequent issue of the Labour Gazette. Are there, to your knowledge, similar statistics dealing with the wage bill as a percentage of the cost of production in the various industries dealt with in the table?

Also, I would appreciate direction to the source of any material which might expand the last column of this very excellent table.

Charles Levinson

Labour Gazette,  
 Dept. of Labour,  
 Ottawa, Ont.

The figures representing the wage bill as a percentage of total sales for manufacturing industries were derived from the latest Census of Manufactures (1939), which was published by the United States Bureau of the Census. There is no similar comprehensive compilation of data built on the concept of "cost of production"—which, we presume, would be value of sales minus profit.

For nonmanufacturing industries, we had to have recourse to other sources, the majority of which, as footnoted, had more easily available the total salary and wage payroll rather than just the wage portion thereof.

You can expand this column for other manufacturing industries by resorting to the 1939 census; to expand it for non-manufacturing industries will present different problems of source information in each case.

## Well-Taxed Railroad

Sirs:

The Arcade & Attica R.R. [BW-Nov. 9 '46, p20] is not a cooperative, although it receives plenty of cooperation from its stockholders. It is a stock company organized under the laws of the State of New York. It has no exemption from any kind of tax. Taxes for the year 1946 showed an increase of 317% over those of 1918, its first full year of operation.

Since 1928 the track has been rebuilt with treated ties and 70 lb. rail

in place of the wornout 56 lb. and 60 lb. steel originally in the line. The diesel-electric locomotive purchased in 1941 replaced four steamers, and the line still has one fairly modern steam engine as a standby.

Due to the absence of war industries on the line there was but a small wartime increase in our gross revenue, although the increased cost of wages and material made profitable operation exceedingly difficult.

R. I. Cartwright  
 Secy., Treas., Genl. Mgr.  
 Arcade & Attica R. R. Corp.,  
 Arcade, N. Y.

## Research Head

Sirs:

You say that [BW-Feb. 15 '47, p19] "About this time, William J. Brown, 32-year-old president of Technimic, met Dr. George Schwarz. Schwarz has been head of Photo-Produits Gevaert S.A., of Antwerp, Belgium."

Dr. George Schwarz was actually the employ of our parent company, head of the chemical research and analytical laboratories.

R. A. Aspinwall  
 The Gevaert Co. of America,  
 Williamstown, Mass.

## "Look for the Label"

Sirs:

What is this "National Fire Underwriters' Laboratory" mentioned at the close of your otherwise excellent article on "Codes Under Fire" [BW-Jan. 19 '47, p19]?

From our 53 years of experience, we suspect rather strongly that your writer meant us—Underwriters' Laboratories Inc.—the nonprofit, perpetual trust which has for its primary purpose the determination of the relation of various materials, devices, constructions, and methods to life, fire, and casualty hazards.

We have always been in the forefront of fire prevention and fire protection work and, being human, like to have that fact recognized—besides which it benefits everyone if we lead the public to "look for the label" for its own protection and safety.

W. S. Austin  
 Asst. Secretary,  
 Underwriters' Laboratories, Inc.,  
 Chicago, Ill.

Your suspicion is correct. The writer put a regrettably misplaced confidence in the preciseness of his memory for names.

# COMMODITIES

## Last Year's Bill

Today's high hog price result of over-slaughtering last summer. Housewives' strike could bring it down again.

Hog prices last week blew the lid. On Feb. 25, top grade butcher hogs a record high of \$30 per cwt. at Chicago. Since then they have teetered at figures mostly just below that. And that means that mom pays bits for a pound of bacon at the supermarket.

**Signs Told**—To everyday folks who analytically relish pork chops and ham hocks without watching farm statistics, the new price level was a horrid surprise. But to the relative few who fully understand the complex workings of livestock-meat economics, the signs had been unmistakable as far back as summer. They had prophesied then (W-Aug. 24 '46, p21) that "pork will scarce until next fall (1947), which is soon as spring-farrowed pigs from hogs bred this fall can be marketed as hog."

How high the price of hogs can soar entirely within the collective control of U.S. housewives. Any time a sufficient share of the womenfolk decides to pay retail prices dealers now have to get, the back-pressure will make

itself felt at stockyards and farm hog pens by reducing packers' bids for the animals.

• **Demand Still Strong**—As yet, packers report, consumers show no signs of holding back. Obviously alarmed by the prospect of consumer indignation, the packers' American Meat Institute this week urged "that consumers use discretion in purchasing pork . . . retailers have other meats more satisfactory from the consumer's point of view.

Meat processors like the whole thing no more than housewives whose budgets are pinching. Chicago's Union Stock Yards on Monday received 12,000 hogs, about 60% of the normal supply for this season. One of the larger plant's hog killing and cutting gangs consequently worked only seven hours instead of Monday's usual ten.

• **Only a Rumor**—Scare rumors circulated that farmers are selling off bred sows and gilts for today's big money, rather than feed them and their imminent litters of piglets for sale at a problematical price six or twelve months from now. The truth seems exactly contrary to this scuttlebutt.

A large national packer surveyed his plants from Minnesota to Missouri, from Ohio to Georgia, found they are getting only a driblet of any kind of hog females. Obviously farmers are reserving their she-stuff for breeding. Midwestern corn-hog farmers today typically have in their cribs enough corn to feed to market weights all of the pigs

## What's Happening to the Cost of Living

	Food	Clothing	Rent	Gas & Electricity	Other Fuels & Ice	House Furnishings	Misc.	Total Cost of Living
August, 1939.....	93.5	100.3	104.3	99.0	96.3	100.6	100.4	98.6
January, 1941*.....	97.8	100.7	105.0	97.4	104.2	100.1	101.9	100.8
January, 1942.....	116.2	116.1	108.4	96.7	111.8	118.2	108.5	112.0
January, 1943.....	133.0	126.0	108.0	96.8	117.5	123.8	113.2	120.7
January, 1944.....	136.1	134.7	108.1	96.0	122.7	128.3	118.4	124.2
January, 1945.....	137.3	143.0	108.3	95.5	123.6	143.6	123.3	127.1
January, 1946.....	141.0	149.7	108.3	93.8	127.2	148.8	125.4	129.9
February.....	139.6	150.5	108.3	93.8	127.8	149.7	125.6	129.6
March.....	140.1	153.1	108.4	92.9	127.7	150.2	125.9	130.2
April.....	141.7	154.5	108.4	92.6	127.8	152.0	126.7	131.1
May.....	142.6	155.7	108.4	92.2	127.8	153.7	127.2	131.7
June.....	145.6	157.2	108.5	92.1	128.4	156.1	127.9	133.3
July.....	165.7	158.7	108.7	92.1	133.8	157.9	128.2	141.2
August.....	171.2	161.2	108.7	91.8	135.0	160.0	129.8	144.1
September.....	174.1	165.9	108.8	91.7	136.5	165.6	129.9	145.9
October.....	180.0	168.1	108.8	91.6	136.6	168.5	131.0	148.6
November.....	187.7	171.0	108.8	91.8	137.2	171.0	132.5	152.2
December.....	185.9	176.5	108.8	92.0	138.3	177.1	136.1	153.3
January, 1947.....	183.8	178.3	108.8	91.9	142.0	178.5	136.6	153.1

\* Base month of NWLB's "Little Steel" formula.

Data: U. S. Bureau of Labor Statistics; 1935-39 = 100.

## Coating Problem?

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PLASTIC  
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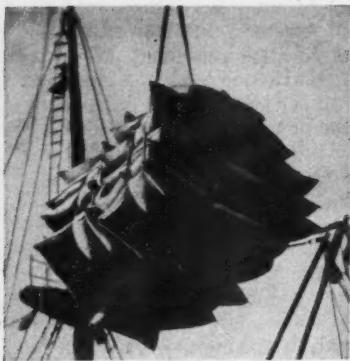
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# COFFEE'S "DEW-POINT DANGER HOURS" Are Over Now!



This #1 coffee, being loaded at Santos, is extremely vulnerable to dampness in shipping. Today Cargocaire controls dampness.



The same #1 coffee, being unloaded in New York—with no soft, pithy beans; no mold; no loss of flavor, aroma and body.

## New Science Prevents Damage from Dampness

Did you ever notice how dew condenses on a glass of cold water in hot, humid weather? This happens because the temperature of the glass is lower than the dew point of the air—that point at which moisture forms.

Any hour in any voyage, the same thing can take place on a far vaster scale in the holds of cargo ships.

For many cargoes, this means the "danger hour." Sweat forms in the hold. Dampness starts its costly damage on cargoes.

But now dampness can be controlled—surely, economically and easily, thanks to Cargocaire, the modern method of dehumidification and ventilation.

### Cargocaire assures good cargo out-turn

Cargocaire operates when the moisture content of the air approaches the danger dew point . . .

whenever a damaging weather front is crossed. It acts also as a ventilating system.

The value of Cargocaire protection for most semi-perishable imports is attested by the preferential cargo insurance benefit provided by far-seeing underwriters.

Cargocaire is already standard equipment on more than 100 vessels of the world's major shipping lines. And 100 more ships may join the Cargocaire Fleet this year.

If you want your cargo protected against damage from dampness, phone or write for the services of the Cargocaire Technical Advisor. No obligation, of course.

If you import or export these commodities . . . coffee, cocoa, grains, canned goods, sugar, flax, seeds, oils . . . then learn how Cargocaire protects you. All are subject to the "dew-point danger hours" and damage from dampness.

# Cargocaire

ENGINEERING CORPORATION

New York • Washington • San Francisco • Seattle  
Montreal • London • Göteborg



they can take care of from spring to fall, with enough left over to bring a similar fall pig crop half way to maturity.

• **Shortage Is the Real Reason.**—Big money is rolling into the bank accounts of those farmers who had the foresight or fortune to raise hogs for marketing at this particular moment. The joker is that there are only a relatively few of the animals. That is why the price is so high.

Hogs are scarce because the U.S. Dept. of Agriculture urged reduction in hog numbers, because feed was scarce last summer, and because high prices during the OPA-holiday in July brought to slaughter sows that otherwise would have farrowed last fall.

• **Beef More Plentiful.**—In times more nearly normal, the present hog shortage would have diverted much of the consumer demand to beef, which is more plentiful. (Chicago received 15,000 head of cattle, a satisfactory number for any February Monday, on the same day that only 12,000 hogs arrived.) But that is the shoppers want pork, and are fooling.

Best guess about this stubborn demand that resists discouragement by high prices: Pork, traditionally cheaper than good beef and containing more energy-procuring calories because of the fat, has always been the working man's meat. Folks in the lower income levels therefore are accustomed to pork. Now, in the backs, they keep on buying pork—and can afford it.

• **But Not as Fat.**—An air of unreality hovers over the entire situation. Old hands in the stockyards cannot recall when the quality of cattle being marketed at this season of the year was as low as now. Practically all show some feeding, but none has been long fed or fed out. Last week, though a few loads sold at Chicago for \$29 per cwt., there were no cattle of actual quality.

Farmers and feeders seem not to believe that present prices will hold, seen bent on hustling their beef critters to market before the bubble can burst. Added incentive: Grain prices rose sharply on the news of increased shipments abroad and of soaring livestock prices.

• **Lower Prices Next Fall?**—What will happen to livestock prices in the months ahead is anybody's guess. There will be more hogs next fall, and a good marketing of grassfed cattle—quality determined principally by next summer's rainfall.

Packers and stockmen had been counting on a sharp break in prices at that time. Now they are not so sure. Industrial payrolls remain high, who can guess how high the meat-hungry public will force retail—and liveweight—prices?

## more Sugar—If

Labor unrest in Cuba is a threat to extra sweetening. U. S. Strife may be averted by a cheaper food for workers.

The American housewife and the industrial food processor are apt to join in a general rhumba at news of Cuba's record sugar crop. But a *Business Week* correspondent reports from Havana that there are plenty of threats that could turn the sugar situation sour before the workers lay aside their machetes. Here is his on-the-spot report.

With the prospect of reaping the largest sugar harvest in its history, one-fifth of the total world supply in its control, and no prospect of a lessening in demand for several years, the Cubans could be riding high. But politics, black markets, labor un-

## FACE, AT A PRICE



An olive branch burgeoned in Chicago's Auditorium Hotel as Attorney Abraham Teitelbaum (left) cut the chicken wire that separated his part of the building from the part owned by Roosevelt College. Roosevelt's president, Edward J. Sparling, shook hands on a \$400,000 deal whereby the college at last acquired Teitelbaum's space for expansion.

Last fall, the college bought a segment of the building for \$400,000. Teitelbaum put up the wire (BW—Oct. 5 '46, p29) when his offer to sell the rest for \$800,000 was turned down.

Another new product from a DuPont Plastic



## HAMMER WITH A NYLON FACE

*...saves replacement costs*

A LEADING manufacturer of loom pickers and soft impact tools set out to find a material for impact surfaces superior to all those commonly used in the manufacture of his products.

He built a machine which struck each material 140 times a minute with a sharp-pointed object giving a 50 ft.-lb. blow. Except for nylon, the best of all the materials he tested endured 60 hours. Nylon lasted over 150 hours—or for 1,260,000 of these blows—2½ times as long as the next best material.

These results, added to his knowledge of the proved qualities of nylon, so impressed this manufacturer that he chose nylon as the facing for the new and better hammer you see above.

Nylon has several important advantages over the material formerly used. It is dimensionally stable, and the face of the hammer does not work loose from the ferrule in which it is seated. Nylon does not mushroom, chip or become "doughy" from internal friction. It gives an effective

blow without bouncing or marring the work. It resists industrial oils and is attractive in appearance.

Perhaps your product could be improved if you knew the facts about nylon or the entire family of DuPont plastics. Write for literature today. E. I. du Pont de Nemours & Co. (Inc.), Plastics Department, Room 603, Arlington, N. J.

*Nylon-faced hammer made by The Danielson Mfg. Co., Danielson, Conn., to be sold under the trade name "Danco-Nylon Hammer."*

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REG. U. S. PAT. OFF.  
**Plastics**  
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...THROUGH CHEMISTRY

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# INDOOR MILES

EASIER

..and SAFER

## SERVICE Material Handling Equipment

Everywhere, you will find leading industries using equipment built by SERVICE for all inter-plant materials handling. By talking to these users, you will also find that this choice is usually based on two very sound reasons. First, they know that for over 30 years SERVICE has never compromised on quality. Second, they know that over these years SERVICE has never failed to keep pace with their ever changing needs.

Today, a complete line of SERVICE material handling equipment is available—ranging from single casters to lifters with capacities of tons—

rugged units designed to give years of dependable service. And today, demands for these better built products are the greatest in SERVICE history. To meet these ever increasing demands, SERVICE is steadily expanding its engineering and manufacturing facilities. To still further reduce handling costs . . . to make indoor miles still easier and safer . . . SERVICE is constantly creating new products and methods, improving on the old.

Whatever your material handling problem, there's a SERVICE solution. Write today for detailed information.

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rest, and the uncertainties of international exchange may mar the picture. The fact that there is enough cane in Cuba for a 6 million ton crop does not guarantee that it will be cut.

• Price Deal—Under the Cuban-American sale agreement, the Cubans receive a price based upon the U. S. cost of living index, with special consideration given to the price of flour, rice, and lard. Theoretically the dollar received in Cuba for sugar will buy an equal amount of the above commodities in the U. S.

On Dec. 15, 1946, the date on which the sugar price was established, the parity stood at 4.93¢ a pound. This became the agreed purchase price, subject to minor alterations.

• The Catch—But when flour, rice, and lard arrive in Cuba and are offered in the stores, the field workers find they must pay double the price at which the food should sell. Further, the government is maintaining wartime controls over meat and producers are refusing to sell at the legally established prices. Meat is in the black market at prices which place it out of reach of the workers' pocketbooks.

The imported flour, rice, and lard are government controlled. So Cuban labor leaders are insisting that someone in high political place, or close to the high politicos, is reaping the benefit of the jacked-up prices. Daily they are forming their followers to stage token strikes.

To date these strikes have not seriously crippled production. But the leaders threaten that, if relief is not forthcoming, they will pull a nationwide strike similar to that which upset the Machado regime.

• A Way Out—Dr. Arturo Manas, secretary of the Cuban Mill Owners Assn. admits that a general strike could be called unless conditions improve, but talks hopefully.

"Conditions are bad," he says. "Our government is either unwilling or unable to remedy the situation here, but there is another alternative. We, the mill owners, have appealed to the U. S. government to set aside a sufficient supply of rice, flour, and lard, at the parity price, to feed our workers during the harvest season. We have agreed to see that the food reaches the workers at fair prices.

"The U. S. government has agreed to the arrangement and I think the general strike threat is removed—at least until the present harvest season ends with the beginning of the rainy season sometime in May. Doubtless our government will have arrived at some solution of the domestic food problem by that time. If not, the consequences are in the lap of the political gods."

• Safe?—If Dr. Manas is correct, and our delivery of cheap food assures a complete Cuban sugar harvest, then the U. S. government is safe in its promises.

# SUBTRACTED SECONDS add up to dollars saved



## Typical Time Saving

This gear blank,  $4'' \times 2\frac{3}{4}''$ , is turned from low carbon, hot rolled steel bar stock on a 5", 4-spindle Acme-Gridley Bar Automatic. 11 operations are required—machine time  $2\frac{1}{2}$  minutes—25 parts produced per hour. Machine removes metal equal in weight to finished part. Requires unusual rigidity for heavy duty turning, boring and forming. Accelerated reaming and internal grooving operations included.

Machine time is just about the only factor in total production cost that is flexible enough to change.

Raw materials cost you just what they cost your competitors. Hourly wage rates are commonly established on an industry-wide base.

But reduce by a second, or even a fraction of a second, the machine time required for producing a long-run part, and you have something that shows up on your cost sheet.

Acme-Gridley modern production methods are helping many a plant keep costs down by saving seconds in production cycles.

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(Please write on, or attach to, your business letterhead)

(BW-3-8)

to give American consumers this year an additional 10 lb. per capita for home use (and a comparable increase for industrial uses).

The U. S. program for internal distribution already is backed by allocation to this country of an increase of 1,500,000 tons by the International Emergency Food Council from the prospective 1947 world crop.

• **Ideology Problem**—But there is another labor hurdle which might develop. Admittedly the Cuban labor movement is Communist controlled. With the thought of fostering international unrest between democratic nations, labor leaders might pull a strike of dock and shipping workers and to up the unshipped portion of the Cuban crop after the harvest is over.

Dr. Manas is emphatic in his opinion on what would happen were such action taken.

"In event of a strike call to block shipment," he says, "I believe both government and the rank and file of labor would revolt. Any failure on our part, other than by act of God, to deliver maximum production in the days of worldwide sugar shortage would put a black eye on Cuba from which she would not recover in a long, long time."

• **Worry for 1948**—The question of Cuba's place in the postwar sugar world is already troubling its growers and mill owners. They are wondering whether next year this country will return to the prewar quota system under which we allocated needs among Cuba, Puerto Rico, Hawaii, the Philippine Islands and our domestic growers.

Under that system the Cubans received about 3,000,000 tons of sugar on the market. If the system is reestablished it would leave them with 2,500,000 tons, assuming a normal year's full production, to peddle in a world market.

• **Exchange Problem**—Great Britain is the most likely customer. But the Cubans realize that they would be paid in British pounds sterling, sterling which would have to be spent within the Empire if it were to bring full value.

The Cubans would like to see Uncle Sam continue to buy the entire crop for it in dollars, and peddle it to Britain.

## STEEL FIGHT WIDENS

A freight rate cut from United States Steel Corp.'s Geneva (Utah) plant to the West Coast has been blocked, at least temporarily. Rate schedules filed by Union Pacific R.R. and four other roads to become effective Mar. 1 were suspended the night before by the Interstate Commerce Commission. ICC set a hearing for Mar. 11 to determine if the rates should go through.

Steel companies, both east and west,

... and Henry Kaiser (BW-Mar. 1 '47, p. 6) in ganging up on Big Steel. Kaiser and other West Coast operators claim the new schedule would cut rates to Geneva's customers 31%, and would discriminate against other western steel plants. Those who protested, besides Kaiser were: Bethlehem Pacific Coast Steel, Sheffield Steel, and Colorado Steel & Fuel.

Eastern steel companies also joined the fray, contending that a reduction in rates in the West would endanger the rate structure for the entire country. Among them were Youngstown Sheet & Tube, Jones & Laughlin, Republic, and Bethlehem. In addition, the commission has received more than 250 communications from other protestants throughout the country.

Railroads lined up with Union Pacific in the cut are the Denver & Rio Grande Western, Western Pacific, Great Northern, and the connecting trans-continental lines.

## FOR GEORGIA POWER

Georgia Power Co. is returning to its tradition of being Georgia-managed. Atlanta-born Preston S. Arkwright, Jr. (below), has accepted the post of president which his father relinquished in 1945. He succeeds New England-born William E. Mitchell, who is retiring



Preston S. Arkwright, Jr.

after 20 years as general manager and two as president.

Young Arkwright has been a member of the company's legal staff since 1926 and a director since 1939. He is resigning from the law firm of MacDougald, Troutman & Arkwright to take on his new duties.

His election as president is believed to be pleasing to the Georgia Public Service Commission, which would like to see the company again in Georgian hands.

## Here's What **NORTON** Makes . . .

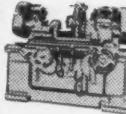
*How Many  
Are You  
Using?*

### Abrasive Products



Grinding wheels of ALUNDUM\*, CRYSTOLON\* and diamond abrasives; discs and segments; bricks, sticks and hones; mounted points; abrasives for polishing, lapping, tumbling and pressure blasting; pulpstones.

### Grinding and Lapping Machines



A varied line of machines for production-precision grinding and lapping and for the tool room — including special machines for crankshafts, camshafts, rolls and car wheels.

### Refractories



High temperature refractories — grain, cement, bricks, plates, tile, tubes — for metal melting, heat treating and enameling; for ceramic kilns; for boiler furnaces and gas generators; for chemical processes; refractory laboratory ware; catalyst carriers; porous plates and tubes.

### Norbide\*



Trade-mark for Norton Boron Carbide — the hardest material made by man. Available as an abrasive for grinding and lapping; in molded products for extreme resistance to wear — especially effective for precision gage anvils and contact points; and for metallurgical use.

### Norton Floors



ALUNDUM\* Floor and Stair Tile, ALUNDUM\* Ceramic Mosaic Tile and ALUNDUM\* Aggregates to provide permanently non-slip (wet or dry) and extremely wear-resisting floor and stair surfaces.

### Labeling Machines



Single and duplex automatic labeling machines for applying labels and foil to beverage bottles and food, cosmetic and drug containers.

### Oilstones and Coated Abrasives



Sharpening stones and abrasive papers and cloth for every use of industry and the home craftsman. Products of the Norton Behr-Manning Division, Troy, New York.

\*Trade-marks Registered U. S. Patent Office

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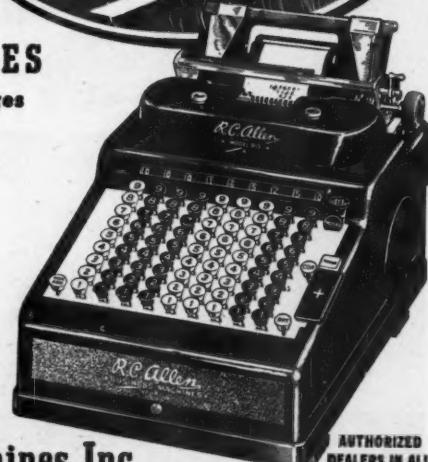
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**Government Copper  
 Stockpile Almost Gone**

The government will be out of the copper brokerage business, volumewise, by the end of the month. The March allocation of copper to industry, about 32,000 tons, leaves only about 23,000 tons in the government stockpile.

And most of what's left in the pile is on paper, either in process of refining in American mills or still en route to the country from South America. This means that allocations from now on will be piddling, limited to the small amounts of metal actually delivered.

• **Price Boost**—Announcement of the March allocation by the Office of War Mobilization & Reconversion was an object lesson in how not to control inflation. OWMR said that the remaining 55,000 tons in the government stockpile would be offered at 21½¢ a lb. Most domestic producers, who had been quoting 19½¢ since early December, raised their price to the new level.

Metals Reserve Co., a subsidiary of RFC, bought or contracted for the metal abroad last fall at 17¢ a lb. The 4¢ import tax was waived on all imports up to the end of the year, and MRC sold this duty-free copper in the domestic market at the going price. But OWMR decided that the tariff could no longer be waived on imports after Jan. 1. So MRC had no alternative but to add the 4¢ duty to its selling price since no funds were available for subsidy.

• **There's Worse Ahead**—With the government stockpile virtually gone, domestic consumers are forced entirely into the open market. If they have to buy abroad, they will pay around 26¢ a lb.—the 22¢ going world price plus the 4¢ tariff. A concerted drive is on to have this import tax reduced or removed (BW—Jan. 25 '47, p103).

**BOOST FOR LECITHIN**

Lecithin users can look for a lot of new sources of supply as the result of an antitrust judgment won by Justice Dept. By the consent judgment's terms, American Lecithin Co. must now license, without restriction, some of its patents on a royalty-free basis, others at uniform, reasonable royalties.

Lecithin, a soybean and corn oil extract, is widely used to preserve and extend lard, oleomargarine, chocolate, and bakery products. It also serves as an emulsifier and antioxidant in various industrial fields.

Anticipating increased demand, some companies have been dabbling in lecithin production; others have been itching to get into it. Now they can be expected to step up their activities.

# NEW TOCCO Heat Gun



Brazing copper bolts to steel sheet with TOCCO Heat Gun

## increases versatility of induction heating

**N**OW you can bring speedy, low-cost, localized induction heat to the work instead of bringing the work to the heat.

The revolutionary new TOCCO Heat Gun . . . a portable inductor with trigger heat control . . . increases the versatility and flexibility of induction heating. It can be used for soldering, hardening, brazing, annealing, melting and

forging. The gun is applicable to both ferrous and non-ferrous metal parts. It is especially valuable for (1) small runs of diversified parts where it often eliminates the need for special inductor coils, and (2) for large or complex parts or assemblies too bulky for easy positioning in a stationary inductor coil. Can be used with any 10,000 cycle TOCCO machine.

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YOUR FREIGHT  
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Whether you're located North, South, East or West the WABASH serves you well when you ship to or through the Middle West—"The Heart of America." A strategic location which permits you to make on-time delivery in the very Heart of the Nation is one reason increasing numbers of shippers are routing via WABASH! Direct-line service between Buffalo and Kansas City—permitting your freight to "highball" between the East and the West—is another reason.

Find out for yourself the advantages of "shipping Wabash." Call a Wabash representative today and ask him to tell you how the Wabash insures careful handling and dependable schedules. As one shipper puts it, "you'll like the way the Wabash treats you."

**C. J. SAYLES, Gen'l. Freight Traffic Mgr.  
St. Louis 1, Missouri**

**Those Who Know**

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**WABASH**



**RAILROAD**

# PRODUCTION

## Wheels for the Turbodyne?

Aviation's hush-hush gas turbine may be adapted to locomotive use by Union Pacific and Northrop-Hendy. Object: lower maintenance, cheaper fuels, greater horsepower per

The gas-turbine locomotive race has an added starter. Union Pacific R.R. has joined up with the Northrop-Hendy Co. in a research effort to adapt the hush-hush Turbodyne—a Northrop aviation gas turbine under development for seven years—to locomotive propulsion.

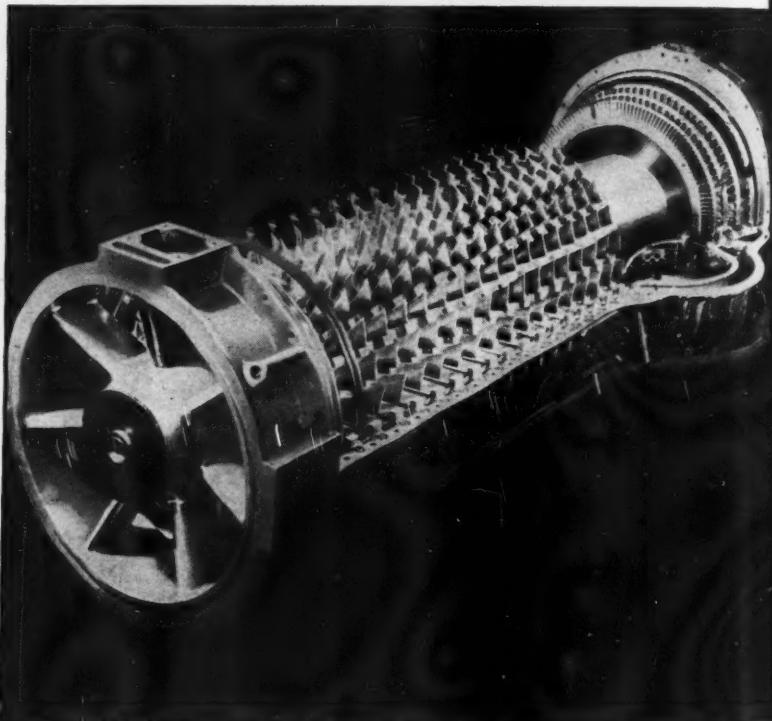
Union Pacific, like the Santa Fe Ry. and the Locomotive Development Committee, sees in the gas turbine reduced maintenance costs, simplified fueling problems, and greater horsepower per cab (BW—Sep. 7 '46, p58; Dec. 7 '46, p64).

• **May Be First**—As matters now stand, Union Pacific appears to be well ahead. Its alliance with Northrop-Hendy may produce a test locomotive before sched-

uled deliveries on the other rail projects. U.P. gets the benefits of Northrop's extensive turbine research to date.

Discussions last year between J. K. Northrop and William M. Jeffreys, vice-chairman of U.P., led to a working agreement whereby Northrop Aviation "borrowed" four months ago—a 6,000 hp. diesel-electric locomotive to use in the research program.

• **Greater Horsepower**?—U.P. is hoping that the commercial version of the engine will produce up to 10,000 hp., replacing diesels of 6,000 hp. (This is the first indication that the aircraft version may be the most powerful)



Cutaway shows operating parts of Northrop Aircraft's Turbodyne—the high-powered aircraft gas turbine that Union Pacific R.R. hopes to adapt to railroad use. Air enters at front, passes through the axial-flow compressor (blades in center). The compressed air feeds into the combustion chamber (bulge, rear) where it mixes with fuel. The hot gas then impinges on the turbine blade (rear) to drive the turbine. In aircraft circles, the Turbodyne is called a pusher type, prop-jet gas turbine. Translated, that means the turbine will drive a pusher propeller and that it will also be used to furnish jet power.

# NOW...

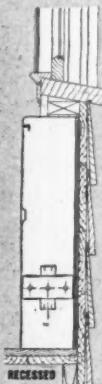
## Convector-radiator COMFORT at the Price of Ordinary Radiators

### Here's HOW the New Trane Model Fits EVERY Application

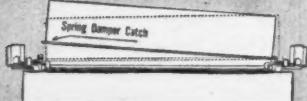
- Works on any hot water or 2-pipe steam heating system.
- Can be installed either free-standing or recessed.
- Complete range of sizes to meet every requirement.

#### HOW THE TRANE CONVECTOR-RADIATOR CAN BE INSTALLED TWO WAYS

The same cabinet can be installed either as a free standing or recessed unit without change and with no difference in performance.



#### HERE'S A PLUS FEATURE



Dampers for the positive control of heat can be obtained and installed in two minutes without tools. Operated by an adjustable chain through the grill, these dampers give instant response without the use of valves.

For a complete description of the entire Trane Convector-radiator line, write for Bulletin S-380A.

#### TRANE'S NEW MASS PRODUCED MODEL GIVES LUXURY HEATING TO EVERY APPLICATION

Now, for the first time, Trane Convector-radiators will be available directly from local stocks—at prices reduced to the level of ordinary cast iron radiators. Formerly custom-built to order, this most modern method of heating is now mass produced for use in every industrial and commercial heating application.

Trane has standardized the Convector-radiator to function with equal efficiency in any hot water or 2-pipe steam heating system. And the new design can be installed in either of two ways, free-standing or recessed. Specification is simply a matter of determining needed sizes, since one style fits nearly every application.

#### COMFORT TO MODERN STANDARDS

The pleasant warmth of Trane Convector-radiators provides a new concept of heating comfort. Rooms are filled with gently warmed air in motion, for a fresh clean feeling that discourages fatigue. Here is the ideal combination of all modern methods of heating.

Trane Convector-radiators blend harmoniously into any surrounding. Their rounded edges and smooth surfaces can readily be finished to match any decorative scheme, yet they have the strength to withstand decades of service. One or a dozen Convector-radiators can be used as replacements in a modernization program, since their use has no upsetting effect on a heating system.

Whether your foremost wish is for comfort, economy, or modern beauty, the new Trane Convector-radiator asks no compromise. Your architect, engineer, contractor, or wholesaler will welcome an opportunity to furnish you with further information.



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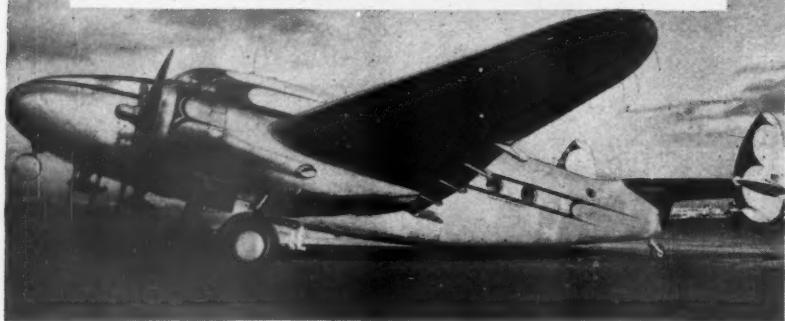
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THE Standard Oil Company (New Jersey) is another in the growing list of well-known plane owners using Irvin Custom-Built Chair Chutes. This new kind of chute not only makes flying decidedly safer, it has many other advantages as well. Chair Chutes are built into your plane . . . fitted into the back of each chair. You don't have to "remember" them . . . "wear" them . . . carry them about . . . or find a place to store them. They're always in your plane . . . in the back of each seat . . . instantly available in an emergency. Irvin Custom-Built Chair Chutes can now be had for all types of planes . . . large or small. They're completely illustrated and described in our Chair Chute circular. Write for a copy today.



## FEEL SAFER . . . BE SAFER

... with Irvin Custom-Built Chair Chutes

There are now over 35,000 registered members of the Caterpillar Club. Should you qualify, please write us.

Illustration shows Irvin Custom-Built Chair Chutes installed in a Beechcraft. Chair Chutes combine beauty, convenience and comfort with tested safety. They cost you little . . . are easily installed. Get them for the plane you own or plan to buy.



**IRVING AIR CHUTE CO., INC.**  
1668 JEFFERSON AVENUE, BUFFALO 8, NEW YORK

Pacific Coast Branch: 1500 Flower St., Glendale 1, Calif.

craft engine to be developed so far. The largest pure-jet units yet developed less than 5,000 hp, by the British Rolls-Royce firm talks of an 8,000-hp. engine.

U.P. and Northrop-Hendry have plenty of engineering problems to solve before their proposed locomotive goes on the rails. The Turbodyne is a high-powered precision aircraft engine. It operates at high r.p.m. and at high combustion temperatures (in a gas turbine power is obtained by burning fuel and compressed air, and directing the stream of hot gas through a nozzle into the turbine blades).

• **Heat Problem**—The aircraft version has a nozzle temperature of 1,400° F. Estimated life, before re-blading is necessary, is 500 hours. This is impractical for commercial locomotive service. So it is proposed to reduce nozzle temperature to 1,250° F., and to cut down rotating speed, and thus obtain useful blade life of 10,000 hr. (This is equivalent, to railroad men, to several years' average service.)

Fuel consumption goes up as nozzle temperature decreases. Theoretically this could go to the point that the diesel might have an edge. But extra fuel costs could be offset by savings in maintenance inherent with the gas turbine.

• **Whose Money?**—It seems that, by its deal with Northrop, U.P. reaps a dividend from war research. To date, \$1,989,454 of Navy and Army funds have gone into the Turbodyne project. Of this, \$483,600 went into building and testing a compressor, and \$1,505,854 was used for building one ground test unit and one complete aircraft turbine with starter and reduction gears.

Although the aviation project was initiated by Northrop, its facilities were taxed by airplane production. So the company made an alliance with Joshua Hendy Iron Works, and formed the Northrop-Hendry Co. to carry out the turbine task.

• **Other Projects**—The Santa Fe Ry. has the Baldwin Locomotive Works and the Elliott Co. sweating on a \$500,000 gas turbine locomotive. This is the first attempt to build a railroad gas turbine using oil as a fuel. Developed horsepower will be in the neighborhood of 3,000.

Two other power units in the 3,000-hp. class are being built by Allis-Chalmers Mfg. Co. and the Elliott Co. for the Locomotive Development Committee of Bituminous Coal Research. These will burn coal. They are expected to appear in the spring of '48, but without chassis until after coal-burning proves successful.

Westinghouse Electric Corp.'s streamlined power unit is on the test block. It produces about 2,000 hp.

General Electric Co. is designing a

## Heat Causes Trouble

Major problem encountered in gas-turbine design is the development of blade materials which can withstand high operating temperatures. Generally, the higher the operating temperature, the more efficient the turbine.

• Temperatures up to 1,500 F are considered about the limit to which heat-resistant alloys can be subjected. So the Germans turned to ceramic materials. Summary of their research is contained in a report, Refractories in Turbine Blades, offered by the Office of Technical Services, Dept. of Commerce.

Sintered alumina is the strongest refractory tried by the Germans. It had adequate tensile strength, but failed to overcome another common problem—how to attach blade to metal shaft. None of the German experimenters reported unqualified success with refractories.

4,000-hp. job which is aimed at the rail market.

• **Good Market**—The Union Pacific prospects for turning its present head start into victory depend on Northrop-Hendy's ability to adapt its fund of aviation research to the heavier gas-turbine apparatus needed for the industrial market. And this industrial market is a good prospect, because it includes not only railroad power, but ship propulsion, and stationary power service.

## SWITCH FROM GAS TO OIL

Tired of interrupting operations because of fuel gas shortages, Allegheny Ludlum Steel Corp. is switching from gas to oil. First step is conversion of the slab-reheating furnaces at West Leechburg, Pa.

When these furnaces shut down during gas crises, 800 men in the hot strip mill and in subsequent cold rolling operations are affected. Some of these men worked but four weeks during the first two months of 1947.

Allegheny Ludlum will survey all gas-fueled equipment at West Leechburg and at its Brackenridge (Pa.) plant. Hope is to have sufficient regular and emergency oil-burning facilities installed by next winter to allow full production.

## PIPE MAKING SPEEDED

Continuous flow through automatic handling is under study by steel engineers as a technique to cut costs and increase output. The sheet-strip process is now the highest form of continuous



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*Alexander E. Duncan*

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production in steel manufacture. But National Tube Co. at its Lorain (Ohio) works is seeking the benefits of automatic handling in other steel processing. To speed production from new double-length, butt-weld pipe mills, the company is installing underground conveyors, which operate 3 ft. below floor level.

Two butt-weld mills deliver the pipe to a cooling bed in double lengths of 43 ft. A saw automatically halves the pipe length, then the pipe is carried by the chain conveyor at 220 ft. per min. to a roller conveyor, which in turn deposits the pipe on a transfer table. The table elevates the pipe to about 3 ft. above floor level, and delivers it into the feed trough of a straightening machine, the first step in finishing.

The conveyor chains have outside links flared for carrying the pipe. Chains are supported in channels between driving and idler sockets, are driven by d.c. motors through gear reducers.



Industrial pallets find new uses: One man unloads a freight car of orange laden pallets in half an hour; A. & P. customers unload them at leisure.

## Oranges by Pallet

New handling technique cuts shipping costs, reduces damages. A. & P. and steel firms cooperate in series of tests.

Production men have a sound appreciation today of the cost-savings obtainable with new materials-handling techniques (BW-Jan.25'46,p38). Merchandisers believe similar techniques can reduce distribution costs. In addition to the accepted use of fork trucks, palletizing (picture, below) is getting increasing attention.

• **Florida to Detroit**—The Pittsburgh Steel Products Co., subsidiary of Pittsburgh Steel Co., has worked out a deal with the Great Atlantic & Pacific Tea Co. whereby steel wire pallets are used to ship oranges from Florida to A. & P. warehouses and stores in Detroit. Tests of the method were arranged by John Cairns, operating superintendent of Pittsburgh Steel Products, and F. H. Bucher, division director for A. & P. in Detroit.

Two pallet bins full of sacks of oranges (each sack weighing 8 lb. 7 oz. and each pallet carrying 75 sacks) were shipped in a regular carload of oranges from Polk Packing Co. in Winter Haven, Fla. The car also contained 26 conventional crates and 2,600 sacks of oranges. The car was unloaded seven days after it left; it was in transit for 10 days. According to the companies involved, not a single orange in the pallet bins was bruised or leaking.

• **Savings**—Advantages of palletizing cited are (1) savings in handling—one handling is saved at loading point and

even at unloading because four (4) wire

Another picture, Exchange

to steam Since car of merc 13'45,p substan

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even at destination; (2) time and labor savings—loading time is one hour, and unloading can be done by one man and fork truck in a half-hour; (3) savings because fruit is not damaged in transit; (4) wire pallets eliminate need for creating floors for air circulation.

Another expected advantage is that the bins can be used for customer self-service, when side panels are removed (picture, page 52).

**Exchange Possible**—Problem: The pallets are not expendable and must be reused or returned to loading points. One way out, now under consideration, is to work an exchange plan with some industrial manufacturer. A&P. ships fruit; he ships parts or products.

The pallet system has been applied to steamship loading and unloading. Since cargo handling runs to about 50% of merchant shipping costs (BW—Oct. 13'45, p31), such containers can offer substantial savings, in addition to reducing losses by pilferage.

## COAL PRODUCTS RESEARCH

Oil companies and independent research organizations are spending heavily on research aimed at converting coal and natural gas into synthetic petroleum products. The federal Bureau of Mines is also sponsoring such studies.

Now, for competitive reasons, the largest commercial coal firm—Pittsburgh Consolidation Coal Co.—is stepping into the picture. Recognizing the competing inroads oil and gas have made on coal, the company has announced an accelerated modernization, research, and development program. In this way the coal firm hopes to produce fuels from coal that will make its product easier to sell. A new experimental station at Library, Pa., will concentrate on the gasification of coal, and on conversion of coal to liquid fuels.

The firm also promoted two engineer officers to vice-president. One, Dennis McElroy, will head the firm's entire engineering program. The other, Joseph Purslove, will be in charge of the new experiment station.

## SMALL TIRE—BUT STRONG

Limited space for wheel retraction on the new Douglas transonic speed plane, the Skystreak, posed a tire problem. B. F. Goodrich engineers solved it by developing a tire with a 4.4-in. cross-section, a 20-in. over-all diameter, and an abnormally high air pressure of 175 psi. Two of them can support a 9,750-lb. take-off load.

Despite the high pressure, the tires deflect 39% under load. (Normal aircraft tires deflect 32%; passenger-car tires 13%.) Strength is obtained by using an 8-ply carcass construction, reinforced with nylon cord.

# TOUGH GOING? ...give it to HYSTER

### Arch-Winch combination on "CATERPILLAR" D8 gets logs out right now!

**PAY-LOADS** in the woods are big loads. And where the going is toughest a Hyster equipped "Caterpillar" is at its best. Here is the statement of an Oregon lumber company manager concerning a Hyster arch and towing winch that has been in operation since 1938:

*"Our Hyster equipment has never given us any trouble. In fact, we have never spent any money on either the arch or winch."*

Words like these are not news

This unretouched photo of a Hyster arch was taken at the Hinkle Creek operation of the Roseburg (Oregon) Lumber Company.

to lumbermen and construction men. They know that Hyster has been making equipment for "Caterpillar" track-type tractors for seventeen years. Rugged equipment—quality built—for the tough going that requires top work performance from men and machinery.

New catalogs are available on Hyster towing winches—yarders—arches—cranes—the new Hystaway. Copies gladly sent on request.

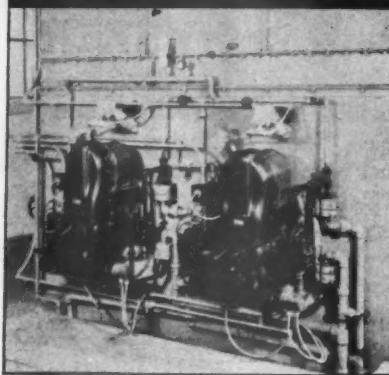
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## NEW PRODUCTS

### Alloy Analyzer

Designed to provide rapid and automatic analysis of various elements in a metal alloy, a new direct-reading spectrometer measures the intensity of spectrum lines electronically. The unit is manufactured by Baird Associates, University Road, Cambridge 38, Mass. It eliminates photographic equipment and, according to Baird, thus obviates possible errors caused by variations in film emulsions.

Spectrometer and measuring system are integrated into one compact unit, thus requiring only one operator. According to the manufacturer, individual spectrum lines can be isolated even in the complex iron spectrum, and their intensity measured with electron multiplier phototubes. The output current of the tubes charges a capacitor, which discharges, at the proper time, into a meter reading directly in percentage concentration of the alloying and residual constituents.

**Availability:** in production; six months delivery on new orders.

### Extreme Ranges

Two new household stoves in David and Goliath sizes have been announced. The giant stove (below) is a product of Western Stove Co., 8536 Hays St., Culver City, Calif. The midget range (right) is manufactured by Landers, Frary & Clark, New Britain, Conn.

No turkey is too big for Town & Country, the large stove. Intended to meet the cooking requirements of large

families and homes in which considerable entertaining is done, the range has eight burners and a large griddle on top. Inside are two large ovens, another oven designed especially for broiling large cuts of meat, and two separate broilers. A plate-warming shelf extends the entire length of the top. The range is fully automatic with clock control.

For use in small apartments and other places where space is at a premium, the Universal Bantam Electric Range bakes, broils, roasts, boils, and fries. The stove



standards which are constant; results obtained are not influenced appreciably by personal factors, it is said. Among possible applications are control of odors of raw materials and finished products in such fields as foods, beverages, soaps, cosmetics, textiles. Availability: delivery about Apr. 1

#### Lamp Socket and Guide

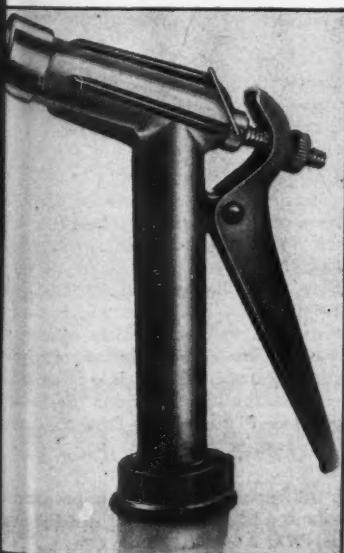
Allied Electric Products, Inc., 76-82 Pitt St., Irvington 11, N. J., has developed a new fluorescent lamp socket. The manufacturer states that it is impossible to insert a lamp so it will remain in the socket and not make positive contact. Guides prevent improper insertion of the lamp. Contacts are of heavy brass. Availability: immediate delivery.

#### Electrode For Cast Iron

General Electric Co., Schenectady, N. Y., has announced a new electrode for welding cast iron when the weld must be machineable. Designated 2075, the new electrode is composed of pure nickel core wire and an extended black covering which is largely consumed in the arc and produces very little slag. The arc stabilizing ingredients used in the covering make the electrode usable on a.c. and d.c.

#### Pistol-Grip Nozzle

A new garden hose nozzle that features a pistol grip, trigger release, and automatic shut-off is a product of Echo Products Corp., Helen and Ella, McKee's Rocks, Pa. A knurled nut at the rear of the nozzle adjusts the spray Master for a variety of fine sprays. Water shuts off instantly when the trigger is released. Availability: immediate delivery.



● **Interlake Resineering**—the functional engineering of a resin to meet specific production requirements—will help you produce a product of superior quality. Interlake's "custom-made" service gives you a resin that is always uniform and dependable. Furthermore, it sharply reduces production costs because the delays necessary to "adjust" each shipment of resins are eliminated.

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In addition, Interlake furnishes analytic inspection reports from its laboratory with each shipment, and offers general consultation service on resins. Interlake Chemical Corporation, Union Commerce Building, Cleveland 14, Ohio.



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Here is an excellent opportunity for a chemical producer to acquire top-quality equipment that may be utilized in place or removed for use elsewhere.

Manufacturers of a variety of products can acquire and profitably put to use, separately or in groups, these well-located factory buildings which are in ready-to-use condition.

#### DESCRIPTION OF FACILITY

**LAND:** Approximately 830 acres, including approximately 295 acres on which the docks and buildings are located, part of which lies west of U. S. Highway No. 31; approximately 510 acres of improved land for expansion purposes or outdoor storage are located east of U. S. Highway No. 31. There are also 5 brine well sites, of 5 acres each, connected with the plant by underground pipe lines.

**LOCATION:** The site, fronting on Pere Marquette Lake and adjacent to U. S. Highway No. 31, is about 3 1/4 miles from the downtown section of Ludington, Michigan.

**UTILITIES:** **Water:** Processing water and that for fire protection, is pumped from Pere Marquette Lake. The water from this lake is used without treatment except that for boiler purposes. The distribution system is designed for a maximum demand of 15,000 gallons per minute at 80 pounds pressure.

**Sanitary Sewage** is discharged through sewer lines to a final lift station on the site where pumps with capacity of 260 gallons per minute discharge the sewage to the City of Ludington Sewage System.

**Power Facilities:** Included is a modern steam-electric generating plant in which are installed the following:

Two 6,000 kw turbogenerators, 3-phase, 60-cycle, 13.8 kv, 3,600 r.p.m., operating steam pressure 400 psi at 700° F., condensing with automatic extraction at 135-165 psi.

Two 250,000 lbs. per hour, each, Riley steam generators, operating steam pressure 400 psi at 700° F., pulverized coal.

Proposals will be considered for the disposal of the power facilities in whole, or in such parts as of themselves constitute complete functional power producing units, for use in place or for removal at the purchaser's expense for his own use elsewhere.

**Gas** is used for testing purposes in the plant laboratories. This is manufactured gas furnished by the Michigan Consolidated Gas Company.

**TRANSPORTATION: Railroad:** There are spur tracks on the Plancor site from the Pere Marquette R. R.

**Highways:** The plant is connected by paved streets, in the City of Ludington, Michigan, with main highways.

**Water:** A dock 2,500 ft. long, built on wood piles on adjacent Pere Marquette Lake, provides excellent dock facilities.

#### EQUIPMENT:

**Powerhouse Equipment:** Includes Steam Generating Units, Coal and Ash Handling Systems, Dust Collectors, Water Treating Systems, Turbine Generators, tanks, heaters, compressors, etc.

**Evaporator Equipment:** Tanks, filters, evaporators with condensers, crystallizers, agitators, mixers, pumps, presses, motors, instruments, etc.

**Lime Dorr Equipment:** Dorr thickeners, classifier mechanism, hydroseparators mechanism, turbo-mixer, slurry mixers, tanks, reducers, bucket elevator, pumps, etc.

**Moore Filter Plant Equipment:** Steel filters, clarifier mechanism, thickener mechanism, tanks, blowers, agitators, washer, drying tumbler, extractor, heaters, trucks, etc.

**Shelf Dryer Equipment:** Tanks, complete stoker units, including: grate stokers, ash handling system, coke bunkers, conveyors, elevators, scales, rotary mixers and screens, pulverizers, scrubber towers, etc.

**Lime Kiln Equipment:** Steel rotary kilns and slakers, conveyors and elevators, scales, hoppers and bins, screens, pulverizers, exhaust equipment, etc.

**Carbonate Plant Equipment:** Tan blowers, mixers, agitators, motor pumps, instruments, etc.

**Machine Tools:** Drilling, grinding, milling machines, shapers, saws, planer, threader and cutter, bending machine, hydraulic press, rotary machine, shears and other miscellaneous tools.

**Cranes:** There are numerous cranes and hoists throughout the plant, including one 150-ton overhead crane, span 90' one 25 and one 10-ton traveling crane with spans of 50' and 47' respectively two 2-ton and two 1 1/2-ton monorail.

Also items of Laboratory and Test Equipment, Furniture and Fixtures, and Portable Tools.

**BUILDINGS:** The more important and larger buildings are: Office Building approximately 14,800 sq. ft.; Warehouses, 12,900 and 14,200 sq. ft.; Repair Shop, 39,000 sq. ft.; Powerhouse, 67,200 sq. ft.; Shelf Dryer, 27,100 sq. ft.; Moore Filter, 43,100 sq. ft.; Evaporator Building, 20,000 sq. ft.; Lime Kiln Building, 17,300 sq. ft. Many smaller buildings and structures.

**CREDIT TERMS** may be arranged. Consideration will be given prior to for small business. War Assets Administration reserves the right to reject any all proposals.

Final written proposals for the sale or lease of this facility will be received by the War Assets Administration, Office of Real Property Disposal, P. O. Box 171, Detroit, Michigan, until April 16, 1947, 10:30 A.M., E.S.T., at which time proposals will be publicly opened and read at the address below. Proposals should carry on the outside of sealed envelopes, the identification: "Sealed Proposal for Plancor 477—Dow Magnesium Corporation".

Information on how to prepare and submit a proposal may be obtained from any War Assets Regional Office.

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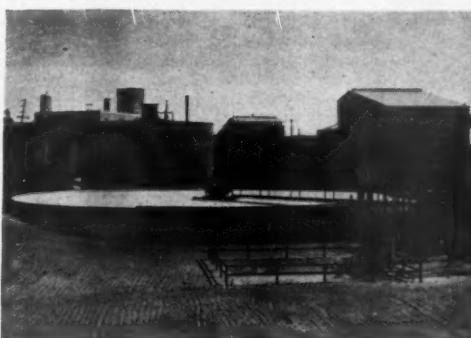


## Features

Excellent plant layout—permanent, readily-adaptable buildings—strategic location regarding markets, raw materials—rail, water, highway, air transportation.



Most of these buildings, if not utilized for the purposes originally intended, could be converted to varied manufacturing and industrial purposes.



For additional information about this property address:

## WAR ASSETS ADMINISTRATION

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## FINANCE (THE MARKETS—PAGE 110)

### Carnegie Corp. Investment Sag

Huge endowment created in 1911 is still intact—after grants of \$100 million. Foresight of founder enables trustees to revise policies to meet changing economic conditions.

When Andrew Carnegie in 1911 capped his extensive philanthropic program by setting up the Carnegie Corp. of New York, he made good use of the foresight and sagacity that had marked him as one of the 19th century's industrial titans.

In creating this top organization of the so-called Carnegie Trusts, the financier did more than merely provide an endowment that he considered large enough to cover all contingencies. He also showed that he was aware that its trustees some day might not find it an easy task to fulfill his wishes, or maintain the original endowment intact. And he did all he could to offset these factors, and to provide future protection for the trusts—the world's second largest group of private philanthropic foundations.

• Power for Trustees—Since he knew that "conditions upon the earth invariably change," Carnegie saw to it that trustees of the new corporation would never lack leeway to meet future conditions that might threaten its activities.

This important contingency was guarded against by specifically stipulating

that the trustees were to have authority to change policies or cause hitherto aided, from time to time, which in their opinion has become necessary or desirable."

Proving the wisdom of this foresight took some time. Nonetheless, it is mainly because of Carnegie's sagacity that the corporation's finances have been able to withstand successfully the ravaging effects of two world wars and the greatest boom and worst depression the nation has ever known.

• Gifts of \$100 Million—In their Sept. 30, 1946, fiscal report, the corporation's trustees showed total original capital of \$135,337,000 intact. They also point to depreciation reserves and a surplus totaling almost \$24 million and an investment portfolio with a market value of some \$10 million above its cost (at book value).

This showing, moreover, has been accomplished over and above grants to colleges and others of \$100 million. The steps taken by the Carnegie trustees and financial staff to achieve their primary objective of maintaining the endowment and securing a fair return on capital have long been considered

### "Safety of Principal" Cuts Income

How Carnegie Corp.'s income has declined as changing economic winds have forced revision of its investment policies is shown below. The basic aim of "safety of principal" has been

maintained. Distribution of holdings in Carnegie's Main Endowment Fund by major classes compares as follows (in percentages of total investment on a cost basis):

Sept. 30	U. S. Govt. Bonds	All Other Bonds	Preferred Stocks	Common Stocks	Annual Income
1932	0.3%	89.1%	10.5%	0.1%	\$6,637,000
1933	2.9	87.0	7.3	2.8	6,445,000
1934	8.4	79.4	5.2	7.0	6,422,000
1935	23.6	62.8	2.6	11.0	6,254,000
1936	32.7	47.2	2.2	17.9	5,681,000
1937	52.2	28.9	1.8	17.1	5,893,000
1938	54.3	26.2	1.3	18.2	4,748,000
1939	62.5	19.4	1.4	16.7	4,479,000
1940	63.8	15.2	2.0	19.0	4,393,000
1941	64.5	13.4	2.4	19.7	4,445,000
1942	68.4	12.7	2.2	16.7	4,281,000
1943	71.0	8.9	2.1	18.0	4,114,000
1944	72.6	8.4	1.7	17.3	4,124,000
1945	67.4	12.6	3.8	16.2	3,990,000
1946	65.2	10.5	7.8	16.5	4,518,000



Andrew Carnegie predicted one sure thing, and provided for it: Change.

any Wall Street security experts as one of the historic sagas in investment management.

**Simple at First**—In the corporation's first 15 years there were only simple investment problems. Of the first \$125,000 endowment, \$90,000,000 was accounted for by United States Steel Corp. 5% bonds, due in 1951, transferred to Carnegie in payment for the properties he had sold Big Steel. The remainder was comprised of steel corporation underlying bonds and other high-grade corporate obligations.

This original endowment was increased by \$10,336,886 when the Carnegie estate was settled in the early 1920s. Up to then income had run around \$5,500,000 annually. And for some time after the new funds had been invested yearly income remained consistently around \$6 million.

**Profits in Steel**—It wasn't long, however, before clouds appeared. The boom that was to burst in 1929 was then picking up speed. And more and more "smart" investment managers were beginning to fall for the lure of quick-and-easy stock market profits.

Carnegie Corp.'s trustees were soon to have huge funds available for investment. By 1928 they were able to sell \$10 million of their Steel 5s at 114 1/2 per and reap some \$1,500,000 of profits. The next year also saw the remaining block go at a price of 115 and another \$12 million gain chalked-up.

**Reserves Set Up**—However, neither finance committee nor its staff of financial experts permitted boom conditions to sway their investment judgments. In

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No insurance will cover the loss of time and efficiency that goes with worn-out, dog-eared, dingy records except a policy that you can make yourself . . . the policy of

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keeping all records *worth keeping* on WESTON Record, Ledger, Bond, Index and Machine Accounting Papers. Made of strong, durable cotton fibres expressly to provide an enduring foundation

for business records and correspondence, they insure uniform service and satisfaction during the life of all important or much used records.

Remember, that important letters are records, too! Ask your printer, stationer or supplier to show you WESTON Bond Papers made especially for important correspondence and letters that bear information worth keeping.

BYRON WESTON COMPANY, Dalton, Massachusetts

### Use WESTON Papers for important records of SALES and DISTRIBUTION

#### Agreements

Adjustment Records  
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Customer Records  
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Inventories  
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#### File Lists

Quotations  
Sales Manuals  
Shipping Records  
Statements

# Weston

Makers of Papers  
for Business Records





*The Main London Office, shown above, is located at 32 Lombard Street—a thoroughfare famous for its centuries-old association with British and international finance.*

*Below—Big Ben and the Houses of Parliament.*



## 50 Years of American Banking Service in England

Established in March, 1897, as one of the earliest branches of any American bank in Europe, our Main London Office has provided uninterrupted service throughout a period witnessing the strains and dislocations of two World Wars. Other branches, in England and on the Continent, are our London branch in Bush House, and our branches in Paris and Brussels.

These branches afford to American companies, banks, and travelers and residents abroad, the facilities of American banks with American methods, with

intimate knowledge of European conditions and enjoying long-established relationships with important European banking and business organizations.

To companies in the United States that now have or are contemplating the establishment of branches abroad; to American business men interested in trade possibilities in Europe; and to Americans abroad, whether for business or pleasure—the facilities of these branches are of special value. We welcome inquiries regarding any phase of our service.

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**Fifth Ave. at 44th St.  
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**Madison Ave. at 60th St.  
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New York 20**

**BRUSSELS**  
27 Avenue des Arts

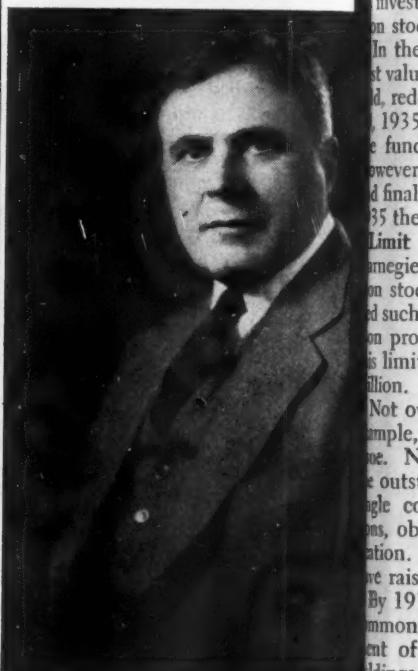
1926, and again in 1928, in fact, committee recorded decisions not to stampeded into buying common stock.

Profits from the sale of Big Ben bonds were used to initiate a depreciation reserve designed to "provide a margin of protection against possible future depreciation in the market value" of Carnegie Corp.'s investment portfolio. And the 1929 fiscal year saw almost \$118 million used to purchase a diversified list of high-grade bonds and preferred stock.

As a result, when stocks started the memorable 1929 nosedive, the corporation appeared in an unassailable position. Its investments included only high-rated bonds and preferred stock issues and no holdings of common. \$125,336,869 endowment was still intact. And it had built up out of equity profits a \$13,700,000 depreciation reserve.

• **Too Many Rails**—As the post-1929 depression deepened, however, it became evident that the earlier boom had done more than inflate stock market prices. It had tended to conceal the fact that many so-called "sound" bonds and especially railroad issues, actually were backed up with earnings as destined to show little staying power once the going really became rough.

This proved a serious matter when the corporation's investments were concerned. On Sept. 30, 1932 (table, page 62), corporate bonds represented 80% of the total portfolio. Some 53%



Devereux C. Josephs' experience in investment banking was a factor in his election to presidency of Carnegie Corp., a post he has held since 1932.

fact, not to on stock Big S deprede a m value portfo v alm a d and p teed the corp ble pa ed sti on, still ut of depre

ost-18 , it pom mat ceal " bon actu as g powr, though, er whre were oole, pa ed S 53%

the bonds were rail issues, mainly of the long-term variety. Utility bonds accounted for only 32%; industrials represented 7%; the remainder of the bonds were foreign government and domestic and Canadian state and municipal issues. Few of its security holdings escaped price-damage in the depression years. The preponderance of rails among the holdings, however, accentuated the situation. By 1932, as a result, securities holding \$140,487,000 had a market value of only \$123,369,000. Even after deducting the hefty depreciation reserve, the original endowment on this basis was some \$3,340,000 under water.

**Switch in Policy**—What had happened, however, hadn't escaped the eye of Carnegie Corp.'s trustees. It was evident to them that drastic changes in their original financial policies were imperative—if their primary investment aims were to be achieved. They wasted time in starting to solve the problems. Nor did they worry too much about any of the initial sharp losses.

To improve the market-resistance of the portfolio the trustees soon decided to change sharply the proportion of total capital placed in different types of investments. They started to increase substantially holdings of U. S. government issues. Ownership of corporate bonds was simultaneously reduced. Steps were also taken to shorten maturities of the fixed-debt portion of its corporate holdings. And the corporation decided to start channeling a portion of investible funds into high-grade common stock issues.

In the next decade, securities with a total value exceeding \$515,000,000 were sold, redeemed, or exchanged. By Sept. 1, 1935, the drastic switches had cost the fund a loss of some \$7,400,000. However, the shift in investment policy had finally started to pay off. Ever since 1935 the trend has been upward.

**Limit on Common Stocks**—When Carnegie Corp. first started to test common stocks, its finance committee limited such purchases to \$5 million. These men proved their worth, however, and this limit has since been raised to \$35 million.

Not over 5% of the \$35 million, for example, can be invested in any one issue. Neither can more than 1% of the outstanding common stock of any single company be held. Such provisions, obviously, make for great diversification. Time has also proved that they have raised the safety factor.

By 1936 the corporation was holding common stocks involving an investment of \$25 million. In 1941 these holdings rose to a peak of \$29,600,000. Last fall \$24,600,000 of common shares still remained in its portfolio.

**No Paper-Profit Lure**—Never have Carnegie Corp. trustees endeavored to make any big killings for the corpo-



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Noise destroys office efficiency. Yet for only 3¢ a day per person—when figured over just a few years—you can install ceilings of Armstrong's CushionTone and get rid of the bedlam of clattering machines, ringing bells, and loud voices.

CushionTone is a good investment because you'll save this 3¢ a day many times over through increased efficiency of your staff. They'll do more work, do it better, make fewer costly errors.

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What's more, CushionTone is a good reflector of light, and it provides extra insulation. It can be installed on any type of ceiling structure. Ask your local Armstrong contractor for an estimate. See for yourself how economically you can install noise-quelling CushionTone throughout your office.

**WRITE FOR FREE BOOKLET**, "How to Exterminate Office Noise Demons." It gives complete facts, Armstrong Cork Co., 3003 Stevens St., Lancaster, Pa.

CUSHIONTONE IS A REG. TRADE-MARK.

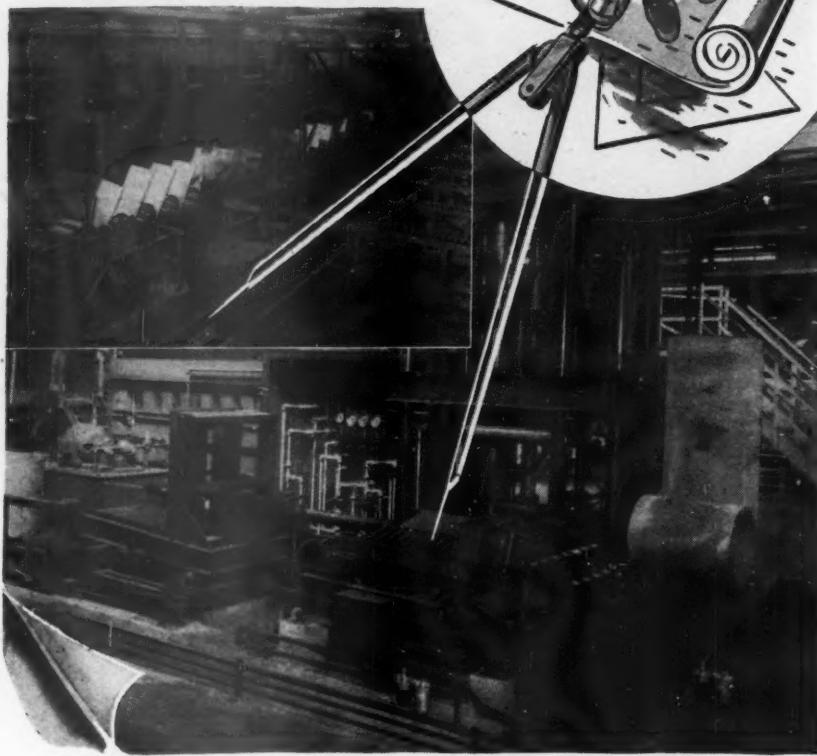
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# Behind the *Show Jobs*

## in Conveying You'll Find **MATHEWS** Engineers



**C**ONVEYING systems which are unusually interesting because of the nature of the material they handle, or because of the intricate and special conveying machinery which is a part of them, are frequently referred to as *show jobs*. Such a system might be found in a modern brass fabricating plant, as shown above — or perhaps in the plant where your favorite beverage is bottled — or where fine pharmaceuticals are being prepared and packaged. Many of the most outstanding among such systems are Mathews installations, developed by engineers who specialize in the efficient handling of industrial products, whatever they might be, and however difficult they might be to convey.



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**MATHEWS CONVEYER COMPANY, LTD.**  
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Engineering Offices or Sales Agencies in Principal American and Canadian Cities

ration by "trading" in common stock. Not even the paper profits of around \$12 million available in such holdings just before the 1937 boom fell appear to have had any influence in this respect.

One factor may be the absence of the stockholder pressure that sometimes forces investment companies to go after trading profits.

Wall Streeters, however, don't think so. They point out, Carnegie has a faith in short-term market swings. Absence of stockholders has nothing to do with it. The condition of the corporation's finances today shows that its emphasis on safety pays off.

• **Trend to Lower Income**—Achieving safety of principal, however, means some sacrifices. In the last 15 years income has slumped sharply. Despite the liberal 5.28% return on the corporation's common stock holdings, the 1946 yield on its entire investment portfolio came to only 3.01% vs. 4.5% during the depression and 5.2% in 1923. But the worst may be over in this respect. In 1945 only a 2.60% return was reported.

### CREDIT FOR CAR BUYERS

The Security-First National Bank of Los Angeles is giving automobile finance companies a run for their business. The bank has polished up a plan that gets the prospective car buyer first.

Finance companies usually make their loans through automobile dealers, who are ready at point-of-sale with pen, dotted line, and a neat package of sale, contract, note, and insurance policy. Thus Security-First National's problem was how to finance a buyer before he started to buy.

Credit in advance is the bank's offer to the advantage of the finance companies hold. The bank has teamed up with insurance brokers who also are circumvented by the package deal the automobile agents offer. Here's the way the bank's plan works:

Cooperating insurance brokers circulate their clients with credit applications the bank supplies. If the applicant is a good risk, the bank issues an auto-purchase card good for six months. If the holder feels the urge to buy a car new or used, during that time, the card is the equivalent of cash at the bank's 124 branches in California. A new card will be issued if the six months lapse.

The arrangement with the bank varies. The card holder may write a check to the dealer for the full price. Or he may sign a purchase contract which the bank will honor within 24 hours. Either means a cash transaction for the dealer.

Insurance brokers like the plan. It helps to plug a leak in their business. The broker responsible for the contact between bank and buyer writes the insurance.

# THESE WAR DEPARTMENT-OWNED plants may SOLVE YOUR PEACETIME PRODUCTION PROBLEMS



## Choose the Building or Plant You Want—31 Chemical, Munitions Loading and Warehousing Facilities—Available Now!...

Convertible to the manufacture of fertilizers, paper products, textiles, chemicals, plastics, metals and alloys, electrical and electronic equipment, building materials, furniture, packing and assembly line operations for foods, beverages and other products.

Good labor markets and transportation.

These plants, which include complete shop and repair facilities, office buildings and utilities, were formerly used for production of oleum, nitric acid, ammonium nitrate, concentration of nitric and sulphuric acid; guns, pyrotechnics and similar items; ethylene, carbon-monoxide, phosgene, formaldehyde, hexamine and chlorinated liquid and gaseous products; carbonyl iron, paste products; fabricated wood and textile items; chemical production and reduction operations.

Present facilities include glass lined, stainless steel, high chrome iron and steel batching equipment; mixing tanks, storage for concentrated acid and other types of chemicals; equipment for nitration and reduction operations, fractional distillation, and allied multiple operations. Mechanical conveying and handling equipment available at most plants.

Over 200,000 acres of agricultural and grazing land also available for lease.

Rentals will be established by competitive bids. Closing dates for individual plants may be obtained from the Division Engineer. Arrangements for inspection of plants should be made with the Division Engineer having jurisdiction. Address all requests for complete information and "invitation to bid" to the Division Engineer of the Division in which the plant is located.

*This information is not intended for use as a basis of negotiations. The Corps of Engineers reserves the right to reject any or all proposals.*

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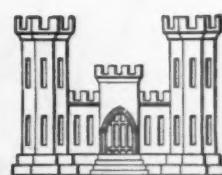
**SOUTHWESTERN DIVISION**  
1114 Commerce Street  
Dallas 2, Texas

**GREAT LAKES DIVISION**  
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Chicago 15, Illinois

**MISSOURI RIVER DIVISION**  
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## Keeshin Perks Up

Bankrupt truck line, under trustee management, is back in the black. Increased efficiency, reduced overhead are credited.

When the giant interstate motor trucking firm, Keeshin Freight Lines, Inc., collapsed into the federal bankruptcy courts in February, 1946, the company seemed almost hopelessly in the red (BW—Feb. 16 '46, p74). It had a 1945 net operating loss of \$656,000 and a January (1946) loss of \$143,000. On top of that the company owed its own employees \$175,000 in back wages, and owed unsecured debts of close to \$1,500,000.

• **In the Black**—Two trustees were appointed by the U. S. District Court to operate the property until an acceptable reorganization plan could be worked out. They have just reported on the first eleven months of their management.

Trustees Walter F. Drohan (who took over as president of the company when its founder, John L. Keeshin, pulled out in November, 1945) and Daniel D. Carmell, Chicago labor attorney (BW—Apr. 13 '46, p79), turned in

a surprising record. They reported a net operating profit for the period from February through December, 1946, of \$94,000—after payment of the back wages.

The spectacular earnings improvement was, in part, due to a boost in revenues; net revenue was up from a low of \$400,000 in February to \$729,000 in October. A rate increase of 20¢ per cwt. on less-than-truckload shipments granted by the Interstate Commerce Commission in February, also contributed to the good showing. (The rate increase applied to all truckers in the Central Territory. But it was particularly helpful to Keeshin, because 50% of Keeshin's business is L.T.L.)

• **Overhead Cut**—But the biggest factors in putting Keeshin in the black were reduced overhead and increased operating efficiency. These were achieved by cutting out some unprofitable territory, by retiring expensive old equipment and rehabilitating the remaining equipment, and by reducing personnel.

The two biggest immediate needs according to the trustees: new equipment to cut down present high maintenance costs on prewar trucks and trailers; and a 14% increase in rates to cover increased labor and operating costs since last year. The rate increase is now before ICC for approval.

## Publicly Reported Dividends Rose 12% in 1946

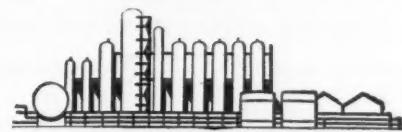
Even before the official score was compiled, businessmen knew that 1946 was a record year for profits (BW—Feb. 1 '47, p15). Dividend figures issued by the New York Stock Exchange confirmed it (BW—Feb.

22 '47, p74). Now the Dept. of Commerce has elaborated on the theme by adding up all publicly reported cash dividends for calendar 1946. They account for about 60% of total dividends, shape up as follows:

	Calendar Year		
	1945	1946	% Change
	(Millions of Dollars)		
Mining .....	\$ 170.1	\$ 192.7	+13%
Manufacturing .....	1,967.7	2,176.1	+11
Food, beverages, tobacco .....	281.5	299.8	+7
Textiles and leather .....	80.7	110.7	+37
Paper and printing .....	65.7	93.8	+43
Chemicals .....	247.4	292.9	+18
Oil refining .....	322.9	363.6	+13
Iron and steel .....	212.6	229.7	+8
Nonferrous metals .....	78.6	81.4	+4
Machinery (except electrical) .....	166.4	178.4	+7
Electrical machinery .....	94.6	101.3	+7
Transportation equipment .....	77.9	76.7	-2
Automobiles .....	203.1	167.2	-18
Other manufactures .....	136.3	180.6	+33
Trade .....	223.9	326.9	+46
Finance .....	516.0	572.6	+11
Railroads .....	216.9	222.1	+2
Heat, light, and power .....	433.3	469.8	+8
Electric light and power .....	369.2	399.4	+8
Gas .....	64.1	70.4	+10
Communications .....	253.8	250.0	-2
Miscellaneous .....	96.5	124.5	+29
<b>TOTAL</b> .....	<b>3,878.2</b>	<b>4,334.7</b>	<b>+12</b>

Q.

WHAT ONE ORGANIZATION CAN



CONSTRUCT AN OIL REFINERY?



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ARRANGE NECESSARY FINANCING?

A.

Stone & Webster, Incorporated... through three separate corporations under its general direction. Singly, or in combination, they are available to American industry—bringing the long-established standards of Stone & Webster performance to the fields of engineering, finance and business operation.

1. **STONE & WEBSTER ENGINEERING CORPORATION** furnishes complete design and construction services for power, process and industrial projects. It also constructs from plans developed by others; makes engineering reports, business examinations and appraisals... and undertakes consulting engineering work in the industrial and utility fields.

2. **STONE & WEBSTER SERVICE CORPORATION** is that part of the organization which supplies supervisory services for the operation and development of public utilities, transportation companies and industries.

3. **STONE & WEBSTER SECURITIES CORPORATION** is an investment banking organization. It furnishes comprehensive financial services to issuers of securities and investors; underwriting, and distributing at wholesale and retail, corporate, government and municipal bonds, as well as preferred and common stocks.

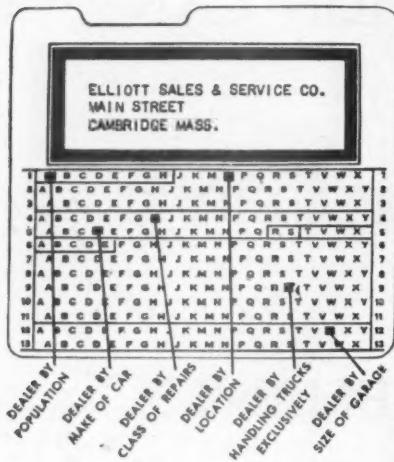
The business of the parent company also includes investments in enterprises to which it can constructively contribute capital... substantial enterprises ready to take advantage of present opportunities or not yet ready for public financing.

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IT'S ONLY 4" x 4"  
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**It provides IDEAL direct mail service for CHILTON COMPANY of Philadelphia, Pa.**

Their 4" x 4" Elliott Address Cards quickly and quietly print the addresses of all car and truck dealers in the United States.

Not only do these typewritable fibre cards eliminate the noise and expense of metal embossed plates but they are also highly selective. With these cards and the Elliott 266-position Automatic Selector, the Chilton Company can send mailings to any selected group or combination such as those shown above.

Whatever your mailing list, the Elliott Index Address Card will take the waste out of mass mailings and allow you to direct your literature to specific prospects in selected groups as thousands of other American businesses are now doing successfully. We have two interesting and informative booklets we would like to send you.

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**A** Do away with metal address plates and noisy addressing and embossing machines, and print better addresses faster, and quietly.

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151 Albany Street, Cambridge, Mass.

# MARKETING

## Wooing the Farmer's Dollar

With farm income 200% higher than prewar, many companies are out to get share of increased market. Sears, Ward open new farm stores. G. E., Westinghouse intensify marketing campaign

Get ready for an avalanche of those old jokes about the farmer's daughter and the salesman. For this year business is out to sell the farmer as he has never been sold before.

Net farm income is now triple the prewar level (BW-Nov. 2'46, p61). And the average size of farms has gone up sharply. Consequently, marketers all over the country are laying plans to do some real business with the farmer.

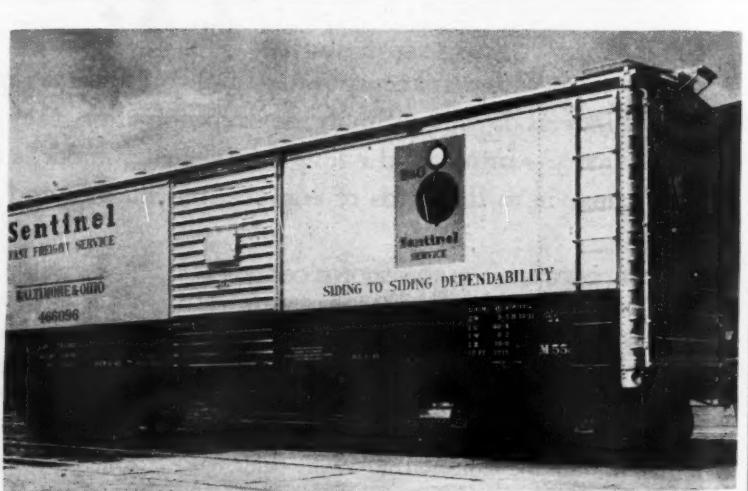
Among retailers, these efforts will be spearheaded by Montgomery Ward and Sears, Roebuck. Among manufacturers, all farm equipment makers will stress aggressive selling. In particular, General Electric and Westinghouse will make special efforts to get the farmer to use more electrical equipment.

• **New Ward Outlet**—Both Ward and Sears—more than ever before—will put the merchandise right in front of the farmer instead of waiting for him to order from the catalog. A few weeks

ago, Ward opened a new farm hardware store in Kansas City, Kan. The new store—most elaborate of its type in the Ward chain—is just a block away from the city's established Ward outlet. But there is no duplication of stock between the two.

In addition to farm equipment, the new store stocks all hard lines, including auto accessories, plumbing and heating equipment, hardware, and building materials. As evidence of the effort Ward is putting behind the new outlet, every hard line in its catalog is stocked there—even though many of Ward's other farm outlets are still lacking many scarce lines.

Ward first began its program of farm outlets in 1933-34, shortly after Sewell Avery took over as chairman of the board. Right now it is busy modernizing and redecorating its other farm stores with a view to lowering distribution costs. The Kansas City operation



### PORTAL-TO-PORTAL FREIGHT SERVICE

Baltimore & Ohio R.R. dangled a new lure before the eyes of carload fast-freight shippers this week: Sentinel Service. At no increase in rates, the road now tells shippers and consignees the time their shipments will take from siding to siding. Heretofore, terminal-to-terminal schedules have been the only guide. The "sentinel" in the case keeps a direct check by company-owned teletype on the freight's progress.

being carefully checked, so that Ward planners will have facts and figures to guide new projects.

What Sears Is Doing—Sears recently opened a new farm store across the street from the main Sears' outlet in Birmingham, Ala. Items stocked range from refrigerators and freezers to the latest type of milking machine. Aluminum roofing and prefabricated garages are also carried. A special feature will be the handling of repair parts for all popular makes of farm implements in addition to Sears' own line. A special loading ramp enables farmers to move their trucks right up and cart the stuff away.

Sears' new department store in Macon, Ga., will include an entirely separate farm equipment store.

Electrical Sales Drive—Both General Electric and Westinghouse are anxious to do something about the fact that the use of electricity on farms has not kept pace with the increase in the number of farms with electricity.

G.E.'s new "More Power to the American Farmer" campaign is an intensification of its already established farm market program. In addition to its regular line of products G.E. is now pushing several new farm lines. These include hay-curing equipment, germicidal lamps for chickens, heated drinking cups for livestock, and specially adapted farm welding machines.

For its farm lines, the company wants at least one dealer in each of the 3,000 county seats of the country's major farm trading areas. In many cases, the already established G.E. dealers in the area will add the new farm equipment lines. There will also be some specially selected new dealers for the farm lines alone.

Accent on Service—Dealers will be expected to maintain service departments. The company maintains that farmers cannot be expected to shell out the capital investment that electrification of the farm demands without assurance on the part of the dealer that immediate and competent repair service will be available at all times.

G.E. has prepared two special sales kits for its farm dealers. Among the materials are a sound and color movie on running water on the farm, and a sound and color slidefilm on farm wiring. Dealers are expected to show these films at special farm meetings.

Experimental Farm—Westinghouse is continuing its test farm near Warren, Ohio, established in 1944. The farm, which is used as a guinea pig in Westinghouse's program of electrification on a pay as you go basis, is run by Joseph Motz and his family. In 20 months, the increased farm income attributable solely to the original electrical investment of \$535 was \$376, a "dividend" of 70%.

# ADHESIVES

by **National**  
ADHESIVES



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# ALUMINUM

travel cases

HALLIBURTON SAYS, "Clothes will arrive anywhere in flawless condition. A tongue and groove closure cushioned with live rubber, seals out dust, dirt and moisture. Halliburtons are the only waterproof and mildewproof cases on the market today. Our women's cases are lined with beautiful shimmering rayon taffeta of the highest quality available; the men's with sturdy sanforized cotton, zelanized for waterproofing and stain-resistance, and mercerized for improved strength and long wear. All pockets are lined with waterproof silk or plastic . . ."

Obviously, there were plenty of difficult adhesive problems.

National Adhesives, 272 Madison Avenue,  
New York 16, and principal cities.

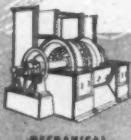
EVERY TYPE OF ADHESIVE FOR EVERY INDUSTRIAL USE



We keep on our toes! . . . Not only is advanced engineering reflected in the performance of the equipment we build, but it's right there when we come to apply Clarage air handling or conditioning to your job . . . Try us!

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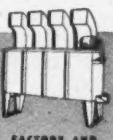
Application Engineering Offices in all Principal Cities



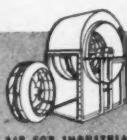
MECHANICAL DRAFT



INDUSTRIAL AIR CONDITIONING



FACTORY AND SPACE HEATING



AIR FOR INDUSTRIAL PROCESSES

## 6 FACTS ABOUT THE AUDIENCE

54% of the subscribers to this magazine are owners, Presidents or vice presidents of companies with which they are affiliated. (Another 30% are major department heads).

1 OF EVERY 3  
is an officer in one or more other businesses,

80% OWN HOMES  
—76% of which are valued at over \$10,000,

1 OF EVERY 2  
owns income-producing property other than his own home,

62% have an estimated gross worth of over \$25,000  
(42% are worth over \$50,000),

38.9% carry over \$25,000 worth of life insurance

(From "Anonymous Please"—A Business Week Market Study—1946.)

## Volume via Credit

As dollar volumes taper off, Gimbel's seeks to spur its sales by adopting a charge account plan for small income groups.

"Those friends thou hast, and their adoption tried,  
Grapple them to thy soul with hoops of steel."

—"Hamlet," Act 1, Sc. 3.

If Polonius had been addressing his remarks to department store executives he could hardly have had more assiduous disciples. Department stores have always sought to hold the loyalty of their customers by encouraging them to use charge accounts. Now they are spurred to even greater solicitation, as unit sales and dollar volume taper off (BW—Feb. 15 '47, p15) and as banks reach out for consumer credit business (BW—May 18 '46, p80).

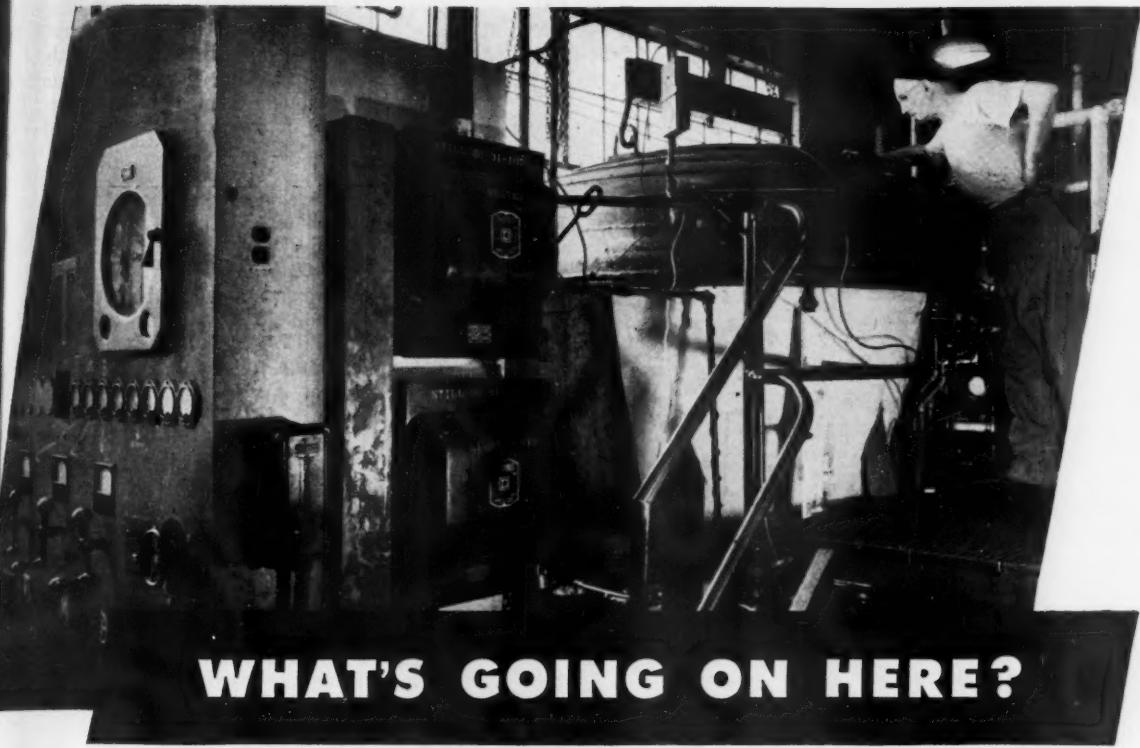
• **A Problem**—Establishing charge accounts for customers in upper income brackets is easy enough. The problem has always been how to extend credit to the low-income customer who has no credit, but is a consistent and substantial buyer. Last month Gimbel Bros. Inc., New York, sought an answer by setting up a rotating charge account system, besides its usual credit services.

William B. Gorman, Gimbel's controller, explained there were other factors in the timing: One was the relaxation of wartime federal credit regulation which reduced the convenience of a charge account. Another was the current buying lull.

• **How It's Done**—Gimbel's version of the rotating charge account allows the



For credit as credit comes due: William B. Gorman, Gimbel's controller



## WHAT'S GOING ON HERE?

*a new process that may mean new earnings for you*

### MOLECULAR DISTILLATION BY DPI

● The operator in the picture above is watching molecular distillation at work in one of DPI's 5-foot Centrifugal Molecular Stills—a commercial version of the laboratory model 14" Centrifugal Molecular Still.

**What is Molecular Distillation?** Briefly, it is "short-path" distillation in exceptionally high vacuum. And it is the only known method by which certain organic materials may be separated or concentrated without heat injury to the ingredients.

**How can Molecular Distillation help you?** Many so-called "undistillables" are readily fractionated and purified through molecular distillation. If you work with substances like heavy petroleum products, animal fats, natural waxes, dyes, medicinal chemicals, vegetable oils—or any similar organic materials with molecular weights from 300 to 1000—it's likely that a laboratory model DPI molecular still could

expand greatly the scope of your research.

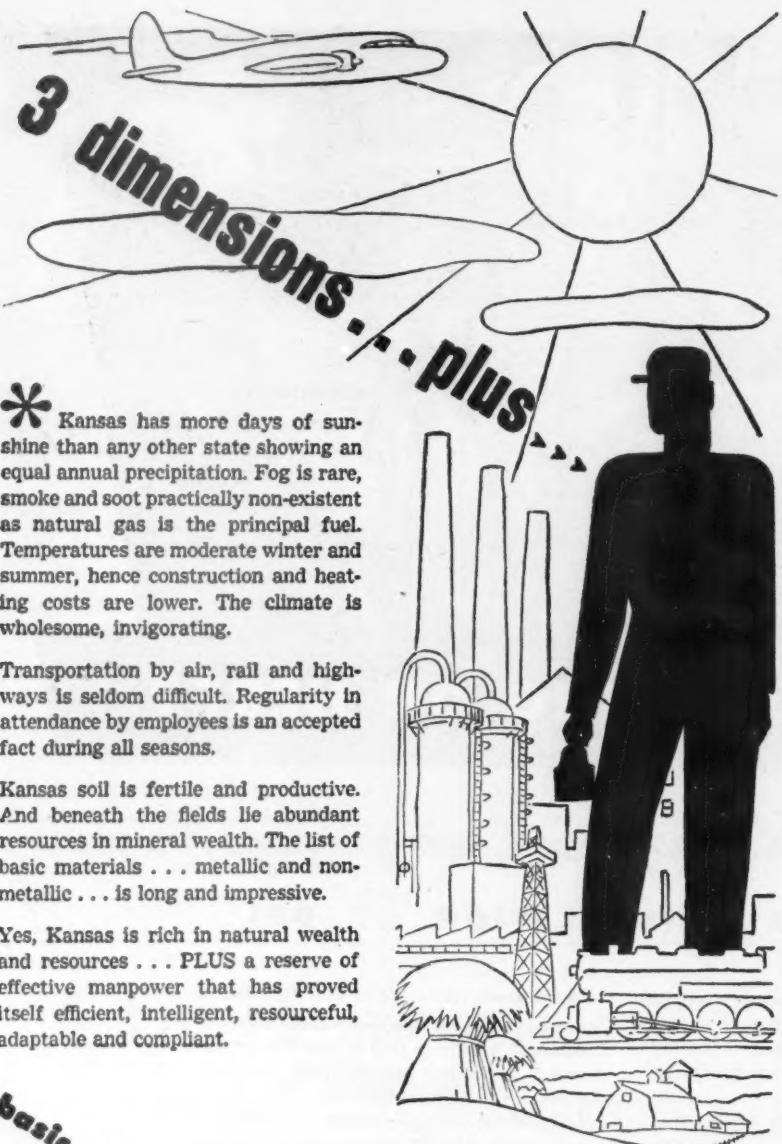
**Where do you get full information about Molecular Distillation?** A letter to DPI is your first step in obtaining the correct molecular still for your own use. Our skilled technicians—men who have pioneered in high-vacuum distillation research—will consider your problem thoroughly. We may ask for samples of your materials, and run them through the molecular stills. The resulting distilled fractions are then sent to you, along with detailed reports and suggestions—all confidential, of course.

Should molecular distillation prove helpful to you, this carefully prepared DPI report would show which of the laboratory-model molecular stills offered by DPI would be best suited for your work. With this unique laboratory tool your path is opened for better research—research which could mean new earnings through new products or improved processing.

**DISTILLATION PRODUCTS, INC.**  
739 RIDGE ROAD WEST • ROCHESTER 13, NEW YORK



*Pioneering in Molecular Distillation and High Vacuum Research*



\* Kansas has more days of sunshine than any other state showing an equal annual precipitation. Fog is rare, smoke and soot practically non-existent as natural gas is the principal fuel. Temperatures are moderate winter and summer, hence construction and heating costs are lower. The climate is wholesome, invigorating.

Transportation by air, rail and highways is seldom difficult. Regularity in attendance by employees is an accepted fact during all seasons.

Kansas soil is fertile and productive. And beneath the fields lie abundant resources in mineral wealth. The list of basic materials . . . metallic and non-metallic . . . is long and impressive.

Yes, Kansas is rich in natural wealth and resources . . . PLUS a reserve of effective manpower that has proved itself efficient, intelligent, resourceful, adaptable and compliant.

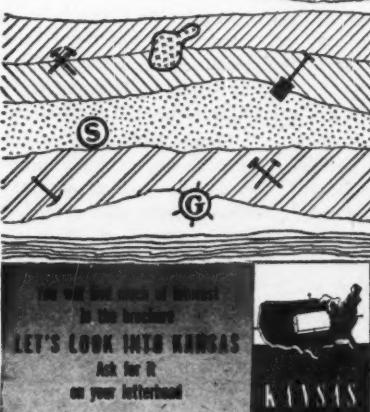
### basic minerals

Alumina Ores	Coal	Natural Gasoline
Ash, Volcanic	Dolomite	Petroleum
Asphalt Rock	Gas, Natural	Pyrites
Bentonite	Gypsum	Salt
Brines, Magnesium	Helium	Sand & Gravel
Chalk	Iron Pigment Ores	Sandstone
Chats	Lead	Shale
Clays, Ceramic	Lignite	Tripoli
Clays, Refractory	Limestone	Water
	Marl	Zinc
	Diatomaceous	

### KANSAS INDUSTRIAL DEVELOPMENT COMMISSION

WILLIAM E. LONG, Secretary-Director  
811-A Harrison Street, Topeka, Kansas

KANSAS *REALLY* MEETS INDUSTRY HALF WAY



customer a fixed amount of credit, multiples of \$30. If her ceiling is \$60, she can charge merchandise up to the amount but pays only one-sixth of \$10—a month, plus 1% a month on the unpaid balance of her account. Each monthly payment reestablishes her \$60 credit allowance.

Major appliances, rugs, and furniture are excluded from the rotating plan. In the first place, such purchases are subject to Regulation W (BW-1946, p21). Anyway, they usually involve larger sums of money than the customer's maximum credit, and require longer payment periods than six months. Gimbels will finance the items through its regular installation plan.

The rotating plan is aimed at numerous small purchases, mostly in some goods lines. That is why Gorman set a six-month limit, on the premise that it is psychologically unsound for a customer to go on paying for merchandise after it is worn out.

• **Other Users**—The plan is by no means new. Gorman established it in L. Bamberger & Co., Newark, in 1939 when he was associated with that firm. Bloomingdale Bros., Inc., New York, has used it several years, and Wm. Filene's Son Co. adopted it last fall (BW-1946, p78) in Boston.

But for Gimbels, which caters to customers with low or moderate incomes, the plan is peculiarly suitable. It permits extension of credit to those who otherwise could not qualify. For example, a \$50-a-week salary might be the minimum for granting a regular charge account, but a rotating account can be offered to a customer earning as little as \$25 a week, if other factors are favorable. Such customers are unlikely to have more than one charge account, even the limited variety, which helps assure their loyalty to Gimbels.

• **Regular Buyers**—The rotating plan also enables the store to extend credit to another consistent buyer who would be a poor risk otherwise—the "careless girl" who earns a modest salary and spends most of it on clothes. The plan is probably more advantageous to stores in metropolitan areas, where the population is relatively transient, than to those in smaller, more stable communities. Gimbels will plug it as a means of tying families over buying peaks like Christmas and Easter.

Gorman hopes that eventually half the store's charge customers will be on the rotating plan. Most of these will be either newcomers to the Credit Department, or customers switched from Gimbels' present coupon book charge system (which will eventually be discontinued).

• **Costs More, But**—The rotating system is somewhat more expensive to administer than the coupon system or insta-

ent plan. Monthly bills must be sent and sales checks photographed so the originals can be sent to the customer. But this expense is far outweighed by advantages:

(1) It has a continuity, with consequent uninterrupted buying. Coupon and instalment plans have not.

(2) Its greater convenience to customers means more buying. For example, every purchase under the regular installment plan must be handled through the credit office. Rotating plan purchases under a certain amount are charged by the sales clerk without even determining if the customer has exceeded her maximum credit.

The obvious question is why a customer willingly pays the store a much higher rate of interest (up to 12% a year) for credit than she would have to pay for the same credit at her local bank. The answer is equally obvious: symbols makes it easier.

## Radio Price Slip?

Despite Emerson's cut, most manufacturers say "No." But dealers are running into consumer resistance on table models.

Whither radio prices? Prospective buyers indulge in wishful thinking that the direction will be downward. Most manufacturers say their costs won't permit reductions. Meanwhile many a tailor, after sweating out the lean wartime and reconversion years, is dismayed to find a buyers' market just as increased production seemed about to bring his anticipated postwar boom.

Price Covered—Morris Silver, an electrical appliance dealer in Rochester, N. Y., got tired of hearing his prospec-



Stewart-Warner answer to production troubles that have cut into output of console radio-phonographs: the "Consolette" table model with legs.

BUSINESS WEEK • Mar. 8, 1947

tive buyers murmur that "they guessed they'd wait and see if prices went down." He called their bluff by announcing a "price protective plan."

Under the plan his store agreed to refund "in cash, unconditionally, the full difference between the purchase price" and any reduced price the manufacturer might establish during 1947.

Two days later Emerson Radio & Phonograph Corp. chopped the price of one of its most popular portable radios (a battery set) from \$49.95 to \$39.95. As it happened, Silver didn't have to make any refunds because he had not sold any of that model.

• **Silver Covered**—Silver did not undertake his plan blindly. He checked first with several radio manufacturers, who assured him that prices "couldn't be reduced." The wording of his promise, specifying price cuts by manufacturers, protects him from having to make refunds if other retail stores cut prices on models his customers bought. He is also safe if a radio manufacturer decides to mask a price cut by bringing out a slightly altered model at a lower price.

Silver says he has set up a reserve fund from a percentage of current sales to cover refunds. He adds that he wouldn't mind paying out a little cash in the interests of advertising.

- **Surprise at Cut**—Whether he gets much advertising this way remains to be seen. Most radio manufacturers professed surprise at Emerson's action and so far have not followed the example. But some observers saw it as a bold bid for the highly competitive portable radio business, since the \$39.95 price is about 25% lower than prices of competitive models.

Others regard it as a realistic consideration of what consumers are prepared to pay. It could be the signal for a return to normal competitive selling. Emerson's output of this particular model is still reported to be less than the demand for it. It is no secret, however, that there has been over-production of small radios in general.

• **Console Demand**—By contrast, there are not nearly enough consoles and radio-phonographs to meet the demand. This is due partly to the scarcity of good lumber to make cabinets, and partly to manufacturers' concentration on table models to meet the demand for radios of any sort (larger models take more engineering and production niceties).

## NO PRICE WAR HERE

Even if price wars on cigarettes develop elsewhere (BW-Feb. 22 '47, p21), you'll still pay 20¢ a pack in Massachusetts, if the state tax commissioner has anything to say about it—and he has.

Henry F. Long, Commissioner of Corporations & Taxation, last month sent a warning letter to all cigarette



## ▷ Sales Area for Improved Lubricants

When your base oils are blended with Monsanto lubricant additives they acquire the "premium" quality that expands your area of sales. By thus improving your product you add a selling appeal that is geared to the greater demands of today's more powerful motors... If you are interested in increasing sales of quality lubricants, Monsanto will gladly place its experience and engine-test laboratory facilities at your disposal... Write MONSANTO CHEMICAL COMPANY, Petroleum Chemicals Department, 1700 South Second Street, St. Louis 4, Missouri.



# Need Skilled Labor?

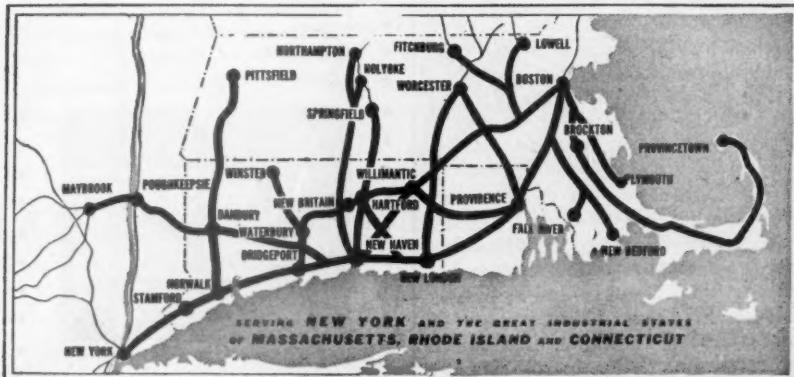


1,743,826 skilled workers live and work in Southern New England.

If your business requires skilled labor, here is a fact worth remembering: 10% of all industrial workers in the U. S. live in Southern New England... more skilled workers per thousand population than any other part of the country! The availability of skilled labor is only one of the many advantages of locating your plant in Southern New England.

For a complete, concise resume of all the advantages that New England has to offer, write for the new, 32-page illustrated booklet, **SOUTHERN NEW ENGLAND FOR TOMORROW'S INDUSTRY**. Address: P. E. Benjamin, Mgr., Industrial Development, New Haven R.R., Room 200, 80 Federal Street, Boston 10, Mass.

THE **NEW HAVEN** R. R.



retailers. He told them that Section 64C of the state's general laws prohibits the sale of cigarettes "loss leaders with intent to injure competitors or to destroy competition." The commissioner's interest is not much in protecting retailers as in protecting cigarette tax revenues.

A survey of the retail selling price of cigarettes persuaded Long that the lowest cost of doing business in Massachusetts is 12.4%. He therefore informed retailers that the so-called popular brands of cigarettes should not be sold for less than 20¢ a package or \$1.50 a carton, and other brands at no less than 12.4% markup.

## New Ad Theme

Better public relations for all business is promoted in institutional copy. Council may top 1946's \$100 million billing.

Wartime changes in institutional advertising are here to stay. During the war, advertisers bought space to urge public cooperation with government programs, such as the bond drive. Later, emphasis shifted to peacetime problems—support of international control of atomic energy, for instance. Now institutional ads are campaigning for good public relations for all business.

- **Substantial Billings**—The importance of this trend is highlighted in the expansion plans of the Advertising Council. First organized as the War Advertising Council, the organization decided to continue on a peacetime basis.

As evidence of success during its first peacetime year, the organization placed advertising billings of \$100 million; its officials had estimated that \$30 million would be the top. (The wartime peak was \$300 million.)

No estimates for 1947 are available but the council expects to do even better this year than last.

- **Bigger Budget**—To insure that its staff work keeps pace with this enlarged schedule, the council is seeking to increase its budget from last year's \$226,000 to \$350,000. Of this total, advertising agencies have pledged \$150,000. Business generally is being asked to contribute the additional \$200,000.

This impost on business is of course a mere drop in the bucket compared to the total value of advertising billings which stress themes indorsed by the council. The cost of these advertisements is all paid for either by general business or by the media.

- **Public Acceptance**—The council has been stressing to business the value of supporting ideas which have gained public acceptance. The council defines

# YOUR LETTERHEADS SHOULD LOOK IMPORTANT



FINE FLAX WRITING LINEN FLAX WRITING

FINE FLAX AIR MAIL

FLAX-OPAKE BIBLE AND PRINTING PAPERS

BOXED TYPEWRITER PAPERS

*Ecusta Paper Corporation*

PISGAH FOREST, NORTH CAROLINA

# INVENTORY HEADACHES?

... a sure cure with  
**Produc-Trol**

WHETHER YOU'RE A RETAILER OR A  
MANUFACTURER ... WHETHER YOUR  
INVENTORIES ARE FOR PARTS OR  
FINISHED PRODUCTS—**PRODUC-TROL**  
CAN SAVE YOU TIME, MONEY, TROUBLE

With the Produc-Trol system of control you can see at a glance the constantly changing status of how much is in stock, how much is needed to meet specific delivery dates, which items are overstocked or understocked, and when you should re-order. These, and many other facts that will make your business more efficient, are made instantly visible—no wasting of valuable time searching through countless records and innumerable cards.

Over 7500 firms, large and small, depend on Produc-Trol not only for inventory control but also for production scheduling, machine loading, budgets, sales management and many other business operations.

★



**Produc-Trol**  
PICTURES FACTS FOR ACTION

**WASSELL ORGANIZATION**  
Westport, Connecticut, Dept. BW-2A  
Tel. Westport 2-4112  
Offices in 68 Principal Cities • U. S., Canada  
and 25 Overseas Countries  
Write today for booklet.

NAME .....

ADDRESS .....

CITY ..... State .....



## BEST & CO. TURNS ON THE HEAT

New York's heavy snowfall last week justified the foresightedness of Best & Co., which had installed hot-water pipes under the sidewalks bordering its new store (BW—Dec. 21 '46, p45). Pedestrians stumbled through neighboring drifts but tripped lightly past Best's door—which won't be opened for business for several months. Philip LeBoutillier, Best's president, explained: "It was either turn on the heat or start shoveling."

public acceptance as (1) an act of Congress that has become law, or (2) approval by three-fourths of the Public Advisory Committee of the council.

The council maintains that such advertisements do business more good than those that merely proclaim the virtues of the firm advertised.

• **Services Contributed**—Once the council does decide on a campaign as publicly desirable, it gets one of its member advertising agencies to draw up the entire advertising program. The agency contributes these services gratis. The next step is to get the required space or time. This is done by getting business sponsors or by direct contribution of the media involved.

The council is perfectly willing to remain in the background and does not request that its name be read over the radio or appear on the ad.

• **Personalities**—Public service themes which are receiving heavy council backing currently are international control of atomic energy, revival of world trade, housing, accident prevention, etc.

For its Public Advisory Committee the council has enlisted personalities of such diverse backgrounds as Presidents Conant of Harvard and Sarah Blanding of Vassar; William L. Batt of SKF, Paul Hoffman of Studebaker, and Clarence Francis of General Foods; C.I.O.'s Kermit Eby and A.F.L.'s Boris Shiskin.

## ELECTRONIC COFFEE

Infra Roast, Inc., has just been formed in Massachusetts to produce the "electronic coffee roaster" invented by August S. Torres (BW—Apr. 20 '46, p10). Torres, the Colombian who perfected the machine last year after nine years of research, will be president of the company. The capital is being supplied by Boston and New York financial interests.

Engineering, which is currently being conducted by Nelson Knight of Boston's Jackson & Moreland, is expected to be completed by June. Torres is confident that mass production will well under way by October of this year.

The revolutionary feature of the machine, little larger than a cash register, is that green coffee beans can be roasted right on the grocery counter in a matter of minutes and handed right to the customer. Torres also asserts that the process cuts shrinkage of the beans in half and also preserves freshness. The economies effected by the machine, he believes, will enable retailers to increase their markup and still cut the price, thus increase demand.

Infra Roast says that it already has many domestic orders and some foreign inquiries. It does not intend to sell the machines; it will license them on a royalty basis.

# MODERN FOUNDRY FOR BIG MAGNESIUM SAND CASTINGS



**LAND AND LOCATION:** Approximately 5.3 acres, at 4900 West Bloomingdale Avenue, near the intersection of West Bloomingdale and North Lamon Avenues and adjacent to the main line of the Chicago, Milwaukee, St. Paul and Pacific Railroad, in Chicago, Illinois.

#### TRANSPORTATION:

**RAILROAD:** Two spurs having a total length of 760 ft., switch to the Chicago, Milwaukee, St. Paul and Pacific Railroad;

**HIGHWAYS:** Adjacent city streets lead to many arterial highways;

**WATER:** Great Lake docking facilities about eight miles away;

**AIRPORT:** Commercial and passenger service at Chicago Airport, about eight miles away.

#### UTILITIES:

**WATER & GAS:** Furnished by local companies;

**POWER:** Connect with city system;

**POWER & LIGHT:** Furnished by Commonwealth Edison Company. (Power current—A.C. 12000/440 volts 3 phase, 60 cycles, and Light current—A.C. 110/230 volts, single phase, 60 cycles.)

#### BUILDINGS:

**MAIN BUILDING:** Contains a 3-story sand-storage tower, two ore rooms, two pattern and pattern storage shops, two chipping rooms, three trim rooms, a boiler room, alloy room, heat-treating room, a laboratory, together with shipping, maintenance, storage, locker, office and other operational and administrative quarters. The over-all dimensions of the ground floor are 317 feet by 505 feet; this includes approximately 2,750 sq. ft. of courtyards and open space. Ceiling height—first floor—20 feet, and second floor—10 feet. Total floor area 6,800 sq. ft.

**EDICAL, PERSONNEL AND GARAGE BUILDING:** A one-story structure, "L"-shaped and containing approximately 6,000 sq. ft.

#### EQUIPMENT:

**MELTING FURNACES:** Four banks of 12 each 200-lb. oil-fired melting furnaces and eight 1200 lb. in the furnace room—with necessary TURBO BLOWERS, each capable of delivering 100 C.F.M.

**HEAT TREAT FURNACES:** Seven vertical type cyclone furnaces. (110 K.W. 440 vt.)

Designed to produce magnesium castings at a rated capacity of 350,000 pounds per month, this plant is especially attractive because of its facility for production of large cast parts.

**CORE OVENS:** One conveyer type baking oven 7 feet 7 inches wide by 85 feet long, gas-fired. Two 6-compartment air heat core ovens 47 feet wide, 12 feet 22 inches deep, 7 feet 8 inches high—each equipped with heating units. One 4-door shelf type core oven.

**HEAT TREAT OVENS:** Two 2-compartment, air heat, gas fired, aging ovens 15 feet wide, 12 feet deep, 7 feet 7 inches high, complete with oven cars and all control equipment. Also two smaller, complete air heat, gas-fired ovens 6 feet wide, 6 feet deep and 4 feet high.

**SANDBLAST EQUIPMENT:** Complete with turntables, dust collector units, flat bag dust unit filter, blast cabinet and induction dust gun.

**MOULDING AND CORE EQUIPMENT:** Included are such items as: sandslingers, moulding machines, strippers, draw tables, blowing machines, jolt squeezers, core rollover machines, and miscellaneous hand and jolt rammers, core barrows, core plates, flasks, strike-off bars, etc.

Also items of: Laboratory and Testing Equipment, Furniture and Fixtures.

Final written proposals for purchase or lease of Plancor 1170, Howard Foundry Company, Inc., Chicago, Illinois, will be received by the War Assets Administration, Office of Real Property Disposal, P. O. Box No. 1085, Chicago, Ill., until April 15, 1947, 3 P. M., C. S. T., at which time all proposals will be publicly opened and read. Specifications for the content of these proposals may be obtained from any War Assets Administration Regional Office.

Reference to these facilities by name of lessee is for identification purposes only and has no connection with the lessee's own plants or facilities. Consideration will be given to small business.

Credit terms for the purchase of this property may be arranged. Information contained in this advertisement is not intended as a basis for negotiation. War Assets Administration reserves the right to reject any or all proposals.

For complete details, address all inquiries to:

# WAR ASSETS ADMINISTRATION

OFFICE OF REAL PROPERTY DISPOSAL

327 SOUTH LASALLE STREET • CHICAGO, ILLINOIS



1042-T

# TAX REVISION...

## Can Make or Break American Business

Is the American way of life—progress by private initiative—going to get a fair chance to demonstrate its superiority over all the challenging varieties of collectivism?

That's the real question before Congress as it confronts the long labor of remodeling the federal tax structure. What Congress does about taxes will come pretty close to making or breaking the U. S. A.

Today the tax colossus that sprawls across the national economy is unguided by any central nervous system. Its crushing weight comes down first here, then there, as the giant wobbles around, unguided by any central purpose except to grab as much as it can.

The central purpose of a tax system is simple. It should raise the necessary revenue without placing unnecessary fetters on enterprise.

As recently as 1929 federal taxes took only one dollar out of every twenty of national income. A loose-jointed and inconsistent tax structure was a nuisance then. But it wasn't serious.

Today the federal tax burden is the dominant element in the nation's economy.

Even if Congress succeeds in cutting \$6 billions out of President Truman's \$37.5 billion budget, federal taxes still will take about one dollar out of every five of the national income. And few Congressmen are hopeful enough to think that they can get the tax load below \$25 billion for any year that is in sight.

### Drastic Budget Cuts Required

Indeed, to get the tax load down to \$25 billion, Congress will have to stop treating expenditures, like those for military purposes and veterans, as politically sacrosanct. Congress must scrutinize *every* item in the budget. Economy must go along with tax cutting or we shall end in bankruptcy.

Suppose that expenditures are slashed to the bone. Our taxes *still* will be so heavy that the *way* they are loaded on the nation's back will make a big difference in how well the nation gets along. That's something which the postwar boom has tended to obscure. It will become much clearer as this boom wears off. Then a remodeling of the federal tax system to remove its manifold obstructions to private enterprise will be of transcendent and obvious importance to everybody.

### Tax Experts Agree

The remodeling will require political courage plus tax wisdom. Congress must supply its own political courage. But it can lean on tax experts for tax wisdom. Fortunately, tax experts now agree on the necessary re-

forms—especially on those that will remove obstructions to business. How well the tax experts agree is shown in the charts on the next page, summarizing answers to a questionnaire on possible federal tax forms. The questions were asked by the Department of Economics of the McGraw-Hill Publishing Company. The answers came from a broad cross-section of experts, including the authors of a considerable crop of books on postwar federal taxes and what to do about them.

The experts agree (see the charts) that double taxation of corporate dividends should stop.

They agree that the tax rate on corporate income (now 38 percent) should be reduced as rapidly as possible to the initial rate on individual income (now 23 percent).

And they agree overwhelmingly that it is desirable to let net losses be subtracted from net profits over a 5-to-6-year period in computing business income for tax purposes.

All three changes would stimulate corporate initiative and hence make jobs. Averaging business incomes would make new ventures attractive even though these ventures *might* result in early losses. Reduction of the corporate income tax would have the same effect. So, too, would the elimination of that highly discriminatory provision whereby corporate dividends are taxed first as corporate profits, and again when received as income by individuals.

### Penalties on Incentives

Beyond these changes, there must be an end to the penalties on *individual* initiative. Consider the enterprising business man whose income fluctuates markedly from year to year. Because of his enterprise he may pay on the same income, twice as much federal income tax as the man who plays it safe for a steady income. That's because he can't average his personal income over several years for tax purposes. He can count on heavy taxation of his good-year profits with no chance for offsetting against them his bad-year losses. It is a case of heads you loose, tails the tax collector wins. Eighty-six percent of the experts agree that an income-averaging allowance for individuals is desirable.

Three-quarters of them also agree that tax rates at the top end of the individual income scale (now running up almost to 90 percent) should come down. In their judgment, the total tax should not amount to more than 50 percent to encourage business men to venture to high stakes.

Advocating tax relief for men in the higher income brackets—and particularly for management men—has

en considered political suicide for more than a decade. Some members of Congress still hold that view. A Democratic Congressman from Michigan told an Illinois colleague who advocated cutting upper bracket taxes, "If you put that idea forward at home, you won't get me back."

The Congressman has an ever better chance of not getting back if our economy bogs down. One of the best ways to bog it down is to keep the taxes that destroy business incentives

and block enterprise — for example, the confiscatory rates which drive the people in the high brackets away from risk-taking.

To give the American system of individual enterprise a fair chance was nearly the mandate November's election. To give it that chance, enterprising business men must have a chance to make large rewards as well as the always-present chance to lose their shirts. Under present tax rates, they don't get a break.

Prevailing federal taxation throttles bold business enterprise in other ways. It fails, for example, to encourage research and rapid industrial modernization. It tends to phon investment away from private enterprise, driving it into tax exempt state and local securities. (The experts agree almost to a man that such tax exemption must be eliminated.) The list of obstacles could be amplified.

#### Hit-and-Run Revision Disastrous

Most of the reforms needed to prevent the federal tax system from smothering enterprise would lower federal revenues, at least temporarily. Elimination of the double taxation of corporate dividends might lop off \$800 million. Dropping the corporate income tax from 48 percent to 20 percent might cut away as much as \$4 billion.

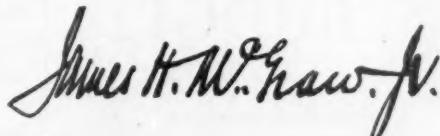
Because we can not avoid enormous federal expenses in the years immediately ahead, all badly needed reforms of the type to which this article is confined obviously can't be made at once. Also there are other tax reforms bearing on consumption which obviously should be weighted in an over-all program of tax revision.

But this is equally obvious: We should have a general design for tax revision which would line up all the necessary steps. Then we could get ahead with tax reductions as rapidly — and as sensibly — as revenue requirements and political courage would permit. Tax cutting may come piece-meal, but tax planning must not.

Through such a design we might discover that some decidedly beneficial improvements in the federal tax structure can be made at relatively slight cost. But today there's no way to be sure. No one in Washington with access to the information has even undertaken to make the necessary estimate.

Instead, federal tax revision continues to be a hit-and-run business — and a short-run political business. Take, for example, the proposal of a 20 percent tax reduction across the boards. There are virtues in such a proposal. But how they stack up beside many other extremely urgent needs for tax reform remains a mystery.

Congress must dispel such mysteries. Only in that way will it do the job of converting our present jerry-built tax structure into a moderately safe abode for the American system of private initiative, sparked by adequate incentives.



President McGraw-Hill Publishing Company, Inc.



## Electric lifting

Why should manufacturers, service shops and other industries continue to lose money by lifting manually when electric lifting is so much faster, safer and infinitely more economical?

With 'Budgit' Electric Hoists men produce much more at greatly reduced costs. Think of the time and physical energy wasted by lifting that could go more profitably into production!

A tired worker is unhappy, as well as inefficient. A 'Budgit' Electric Hoist speeds the work and eliminates over-fatigue and the fear of rupture and sprained muscles.

There are no installation costs—hang up, plug in and use! The cost for current is trifling—not to be considered against the sure savings when electrical lifting replaces human strength.

'Budgit' Electric Hoists pay for themselves many times over in their long life of service. Prove this! Install one and check results as so many thousands have done.



Made in sizes to lift 250,  
500, 1000, 2000 and 4000  
lbs. Prices start at \$119.  
Write for Bulletin No. 371.



**MANNING, MAXWELL & MOORE, INC.**  
MUSKEGON, MICHIGAN

## 'BUDGIT' *Hoists*

**MANNING, MAXWELL & MOORE, INC.**  
DETROIT, MICHIGAN

**MUSKEGON, MICHIGAN**  
Builders of "Show-Box" Cranes, "Budgit" and "Load Lifter" Hoists and other lifting specialties. Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and "American" Industrial Instruments.

# LABOR

## Closed Shop—Off the Record

Business Week survey of employers who are operating under union-security contracts finds that 43% like them. And 59% think anti-closed-shop legislation would be unenforceable.

The great congressional debate on the closed shop will begin soon. Neither House nor Senate can avoid meeting this most controversial of all labor issues, which has become one of management's major problems.

From management's standpoint, how does the closed shop work in practice?

- **They Ought to Know**—Business Week asked the man who has one—on the assumption that employers who are parties to union-security contracts are in the best position to know. It sent a group of its correspondents to interview more than 50 businessmen in plants, stores, and offices from Boston to San Diego.

More than half of them were manufacturers, in lines ranging from aircraft

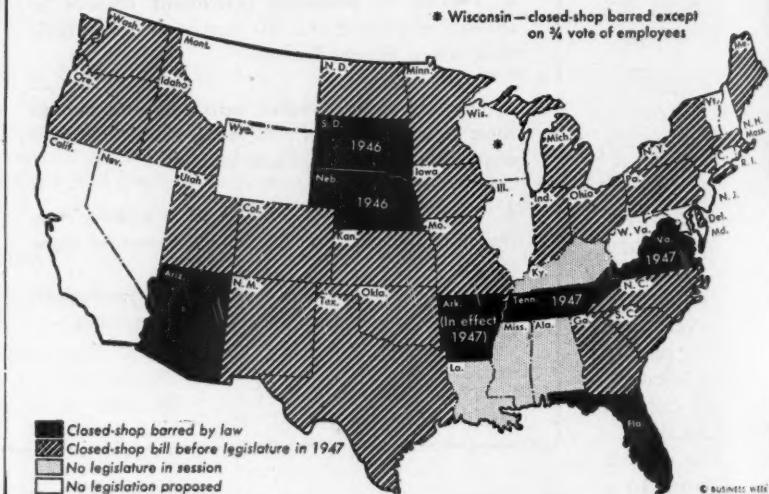
to razor blades. The rest were scattered through the food processing, transportation, publishing, construction and extractive industries. The number of workers they jointly employ runs well into seven figures. All had something in common and were selected by the correspondents because of that fact. Their union contract bound them to the maintenance of membership, a union shop, or a closed shop.

Management spokesmen were assured that their identities would not be revealed. Highlights of their frank replies:

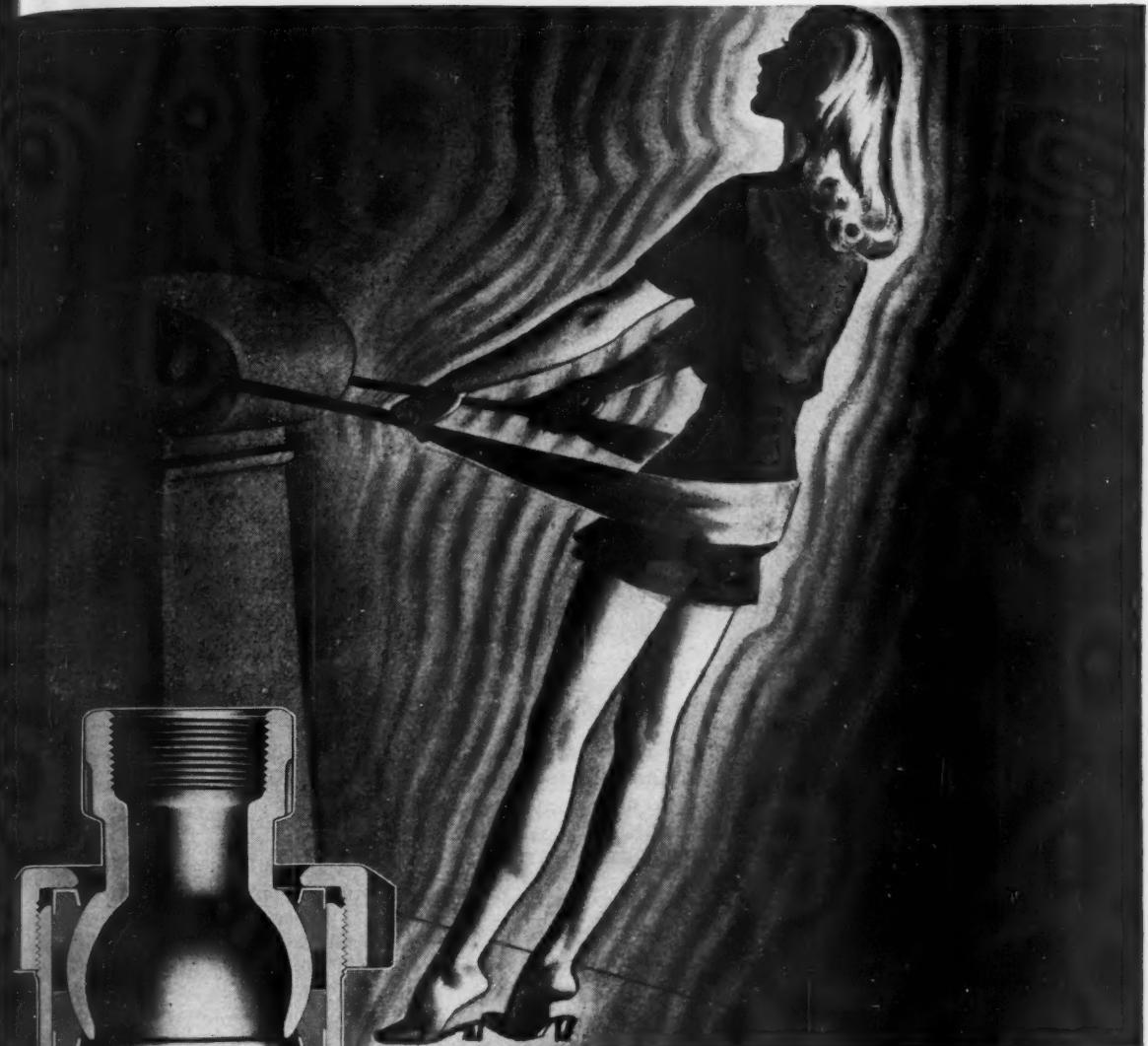
- 57% want union security eliminated but an impressive 43% dissent from the prevailing view. Several among the majority acknowledge some benefits, b

## STATES MOVE TO BAN CLOSED SHOP

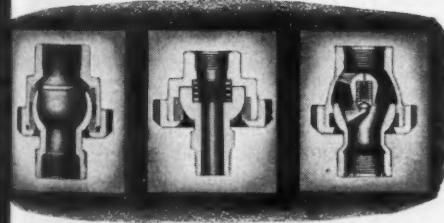
- Wisconsin — closed-shop barred except on  $\frac{3}{4}$  vote of employees



Seven states, in which 4.7% of the nation's manufacturing employees work, have thus far outlawed the closed shop. They are Virginia, Tennessee, Arkansas, Arizona, Florida, South Dakota, and Nebraska. Georgia will be added to that list as soon as a bill passed by the legislature is signed by one or both of the state's governors. Nearly identical bills are actually before legislatures, have been prepared, in 24 other states. In only 13 states is it reasonably certain that the closed-shop issue will not be presented to legislators before the year is out. But constitutionality of the existing laws has not been finally decided—and enforcement meanwhile is meager. It will take a U. S. Supreme Court decision either to stop the movement in the states, or to bring some practical effect out of the state legislation which already has been passed.



## Vibration is good for the figure —but it's tough on fluid lines



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through every angle.*

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are still against union security "in principle."

• Employers who have had it long find the most advantages in it. Some wanted it to begin with, it is perhaps a testimonial to American management ingenuity that so many have been able to find positive values what was once a most distasteful situation for them.

• 59% declare that union security can not be eliminated by legislation. The opinion is that an anti-closed-shop would prove to be unenforceable. Many of them see it as an undesirable move.

• 40% believe that elimination of union security would have no effect on labor relations. Among the other 58% declare the net effect on management of the elimination of such security would be bad.

• Of those who think that union security has made a difference in the amount of their labor difficulties, 52% report it has reduced them.

• And 66% of those who can see no effect think the contracts have less friction and more stability in the shop.

• **Why They Like It**—Here are some of the most common advantages the employers have found in union security:

"It seems to give the union an incentive to settle disputes quickly rather than drag them along for purposes of recruiting new members."

"It has eliminated the time waste and dissension we had before when the union stewards tried to collect dues in company time or in the shop during lunch hour."

"We used to have dues picket lines now there doesn't seem to be any union activity at all in or around the gates."

"It has stopped organizing drives by other unions, where before we were involved in jurisdictional disputes."

"It gives us a pool of skilled workers from which we can hire."

"It has centralized control over employee relations, because we are able now to deal with all our employees as a unit."

"Whenever there is trouble in the plant or some question arises, we know whom we can hold responsible."

"It has made labor costs uniform throughout our industry, thus putting an additional incentive on efficient operation."

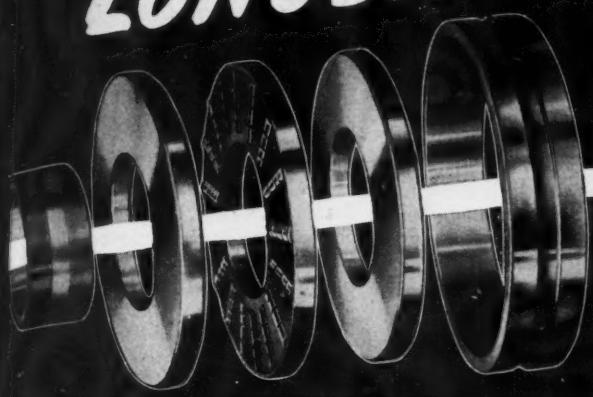
"Cut-throat wage competition has been eliminated."

"It gives us a list of union members."

"In our trade it is the big fact which has kept prices and conditions line."

"We have seen serious employee factionalism under the open shop. The we have seen those employees who we

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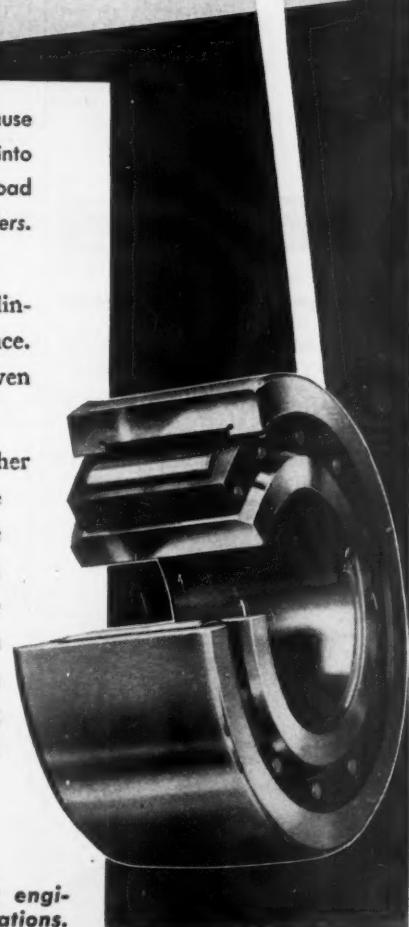
For this reason, Rollway Bearings can use efficiently solid cylindrical rollers of greater mass and cross section area in a given space. The unit load per roller is lower and the load capacity for a given dimensional limit is higher.

As the diagram shows, no oblique loads or resultants, no other compound loads can pile up to increase the magnitude of the simple radial or thrust component. Resistance to shock and vibration is increased. Pinch-out of rollers is eliminated—with less rubbing friction and less wear-back of roller ends. The net gain is clearly apparent in longer bearing life . . . less service attention . . . and lower maintenance cost.



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opposed to the union under an open-shop agreement become union leaders and a stabilizing influence under the union shop."

• **Dissenters' View**—Those employers—a minority—who have seen union security bring them no gains at all in their employee relations offer as reasons those points which have already been made familiar by business representatives before the House and Senate Labor committees.

The most common underlying complaint was most tersely expressed by an industrial relations executive whom our correspondent saw just after he came out of a bargaining session in which he and his union had begun negotiating a new contract. "Gives the union too damn much power," was his comment.

And there is no doubt that he was expressing the sentiments of a great number of employers.

### REDWOOD DEADLOCK

A.F.L.'s Lumber & Sawmill Workers Union recently voted (1,246-to-42) to continue its 14-month strike (BW Jan. 11 '47, p86). Major redwood operators proposed settlement terms which included maintenance-of-membership and a \$1.17½ hourly wage. The union's 16 locals rejected the offer, and demanded again a closed-shop contract and \$1.25 an hour.

Subsequently, the union announced it would tighten its boycott on the "hot" redwood coming from struck mills which have been operating with nonunion workers.

### Wire Trouble

C.I.O. and A.F.L. telegraph in Western Union's key distangle in jurisdictional fight  
NLRB election set for Mar. 2

The stage was set this week what promises to be one of the year's most significant jurisdictional fights, stake is control of employees who are the heart of the Western Union Telegraph Co.'s vast communications network.

• **Claim Filed**—C.I.O.'s left-wing American Communications Assn. has represented Western Union's 7,000 metropolitan New York employees since 1945. Recently, for the fourth time, A.F.L.'s right-wing Commercial Telegraph Union filed with the National Labor Relations Board a claim that it represents a majority of the company's New York personnel.

Since the C.I.O. telegrapher's contract expires Mar. 31, NLRB's new policy of curbing jurisdictional tests (p95) cannot apply. The board's regulations permit an outside union to challenge a recognized union during the 30-day period prior to the expiration of a contract.

• **Left vs. Right**—The C.T.U.-A.C.L. rivalry is deep-rooted. The last election two years ago (BW—Feb. 3 '45, p94) gave the A.F.L. union collective bargaining rights for six of seven Western Union districts. Thus it became the represen-

### Is Experience the Best Teacher?

Unions have long urged a study of the history and economics of organized labor in public schools. The proposals have been received coldly by most school boards. But recent teachers' strikes (BW—Feb. 22 '47, p77) have given students opportunity to get acquainted with unionism—first hand.

Buffalo students were quick to enter into the spirit of their teachers' one-week strike for higher pay. Some joined picket lines. Some staged their own demonstrations for teachers. Slogans were chalked (right) on doors of schools that stayed open; some nonstriking employees were snowballed.

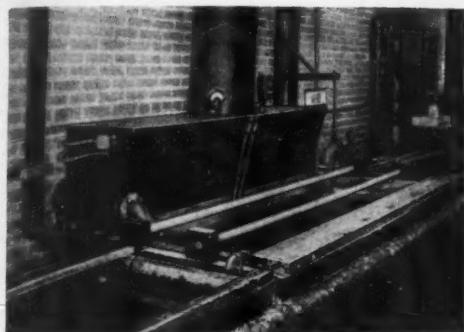
A majority of students refused to pass through picket lines. And as the strike ended with a pay compromise, there was little doubt of one thing: Students had absorbed a down-to-earth lesson in union tactics.



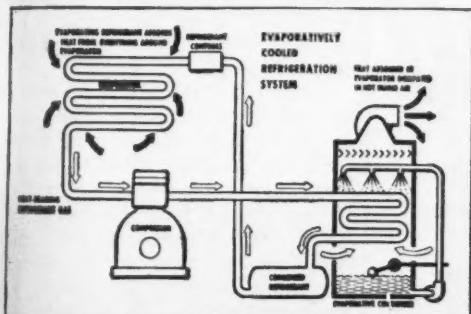
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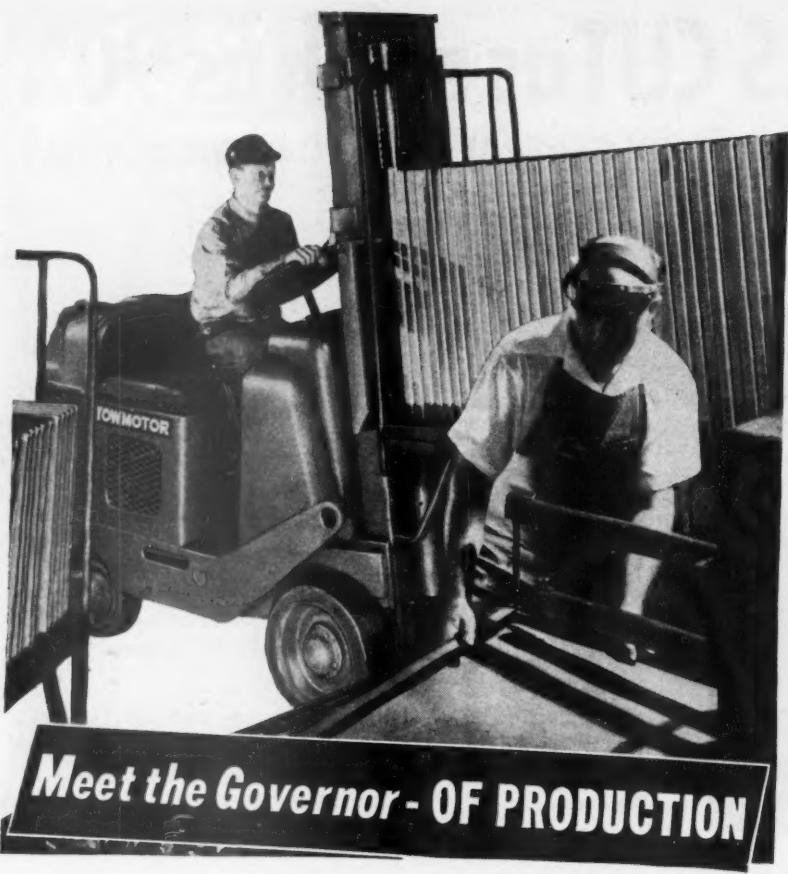
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ative of 50,000 company employees, except those in the New York metropolitan district.

The C.I.O. union won that group (Western Union's most important unit) after a bitter election campaign on left wing-right wing battle lines. The New York workers had been polled twice before in NLRB union tests (May, 1942, and October, 1943) and both times had voted in favor of A.C.A.

This tug-of-war for the important New York segment of Western Union personnel has engendered turbulent labor relations for the company. A C.I.O. contract dispute that led to a crippling strike last year (BW-Feb. '46, p90) was in large part based on union rivalry. A regional war labor board awarded the C.I.O. union more favorable work conditions than those gained by its A.F.L. counterpart. The C.I.O. telegraphers struck to enforce its refusal to backtrack from what it considered a prestige-building position. The strike ended in a defeat for C.I.O. The rival C.T.U.—whose members nationally had ignored the C.I.O. walkout—lost no time. Organizers stepped in while strike resentment still was hot.

• **Shifting Loyalties**—The same A.F.L.-C.I.O. fencing has been noticeable even in purely routine labor relations. A.F.L. indirectly has sought to foment discontent among metropolitan C.I.O. unionists, hoping to gain strength in shifting employee loyalties. The C.I.O. union has fought a defensive action aimed at warding off A.F.L. encroachments.

Last Feb. 5 the A.C.A., aware of a new NLRB challenge just ahead, submitted to Western Union its demands for a new contract. It asked for a 21% hourly increase in wages, a reduction of the work week from 45½ hours to 40 hours, a union shop, and a \$1 million lump sum payment to be shared in retroactive increases for about 1,500 senior employees.

Shortly afterward, C.T.U. filed a petition with NLRB for another collective bargaining election in the New York City district. After a tally of membership cards, A.C.A. advised NLRB that it was in favor of a quick election. Prompt polling of workers, said A.C.A., would permit contract negotiations to proceed without undue delay. NLRB set Mar. 28 as the date.

• **On and On**—Regardless of the outcome of the balloting on that day, one thing will still be certain: The jurisdictional struggle at Western Union's New York operations will not be over. Both unions will still jockey for prestige. The winner will have to fend off raids; the loser will work just as hard to gain commitments enough for a potential majority vote in another sure-to-come NLRB election.



Mine, Mill & Smelter Workers' charter was spirited away, but An- (Conn.) members weren't un-  
a. They were through with it.

## Family Squabble

Left-wing feuds flare up  
three C.I.O. unions. But no  
showdown in the parent  
body itself is imminent.

spreading factional fight (BW-1547, p94) made new inroads into C.I.O.'s leftist Mine, Mill & Smelter Workers this week. The heated communist issue also flared into prominence at least two other C.I.O. unions.

But while each development had its importance and significance, there was no indication that a major leftist showdown in C.I.O. was any

arter in Connecticut—A right-wing split in M.M.S.W. spread from the Connecticut locals of District 6 into District 3, which includes Illinois, Nebraska, Minnesota, Iowa, Wisconsin, Indiana, Michigan, and Ohio. Secession of 25 locals, with a total membership of 5,500, was announced in the latter district; the seceding groups claimed to include 90% of the entire district membership. International union "loyalists," however, said the loss was nearer 1,000, an "insignificant" part of the district.

The 25 small locals reported legally withdrawn from M.M.S.W. in District 3 could bring total secessions to 43 locals with nearly 25,000 members. All have been enrolled in the new Provisional Metalworkers Council, organized by John J. Driscoll, former M.M.S.W. international representative leader in the District 6 revolt.

Where Will It Light?—Driscoll's I.C. announced that it hopes to con-

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tinue its ties with C.I.O., but C.I.O. for the moment—said P.M.C. was not recognized as an official union body.

It was no secret, however, that P.M.C. was being advised—and covered—by C.I.O.'s right-wing Industrial Union of Marine & Shipbuilding Workers. C.I.O. President Philip Murray's United Steelworkers also has a strong interest in the group. An alarming to C.I.O., several large independent unions have hurried to P.M.C.

• **Court Support**—The secession move by District 6 won legal sanction in a series of injunction actions brought by the international union. Temporary workers against locals were dismissed by a Philadelphia federal court and two Connecticut superior courts. In doing so, the courts called attention to an M.M.S.I. constitutional provision which gives locals the right to withdraw at will. A withdrawal, the courts held, does not "extinguish the voluntary association of the local's membership," or affect the right to function as a union.

After the court decisions, most District 6 employers agreed to recognize and deal with seceded locals. Only American Brass Co. and Chase Brass Co. refused. They announced that they would not deal with either party until the dispute is resolved.

Control of the big Ansonia (Conn.) American Brass local, won initially by the international, reverted to secession leaders in a new referendum (930 to 299). Shortly before secret balloting



Big issue for the United Auto Workers' key Ford local: Communists

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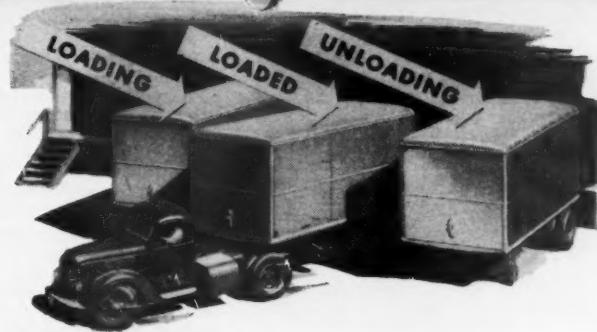
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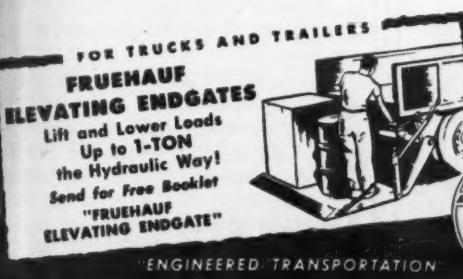
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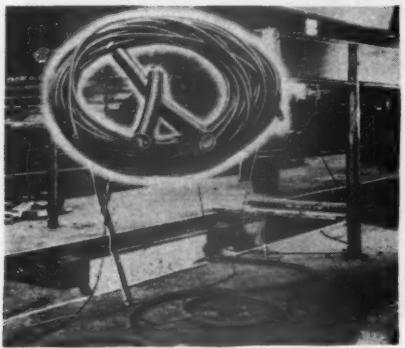
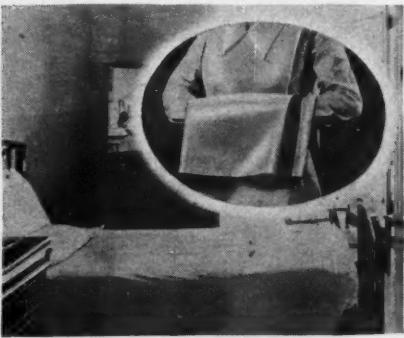
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...THROUGH CHEMISTRY

the local's offices were raided. Among other things, the union charter was taken away (picture, page 91).

• **U.E. Split**—Meanwhile, the fight between left- and right-wings continued in the Bridgeport (Conn.) Local 20 of the United Electrical, Radio & Machine Workers (C.I.O.). An anti-Communist slate recently won a local election. As an aftermath, 27 local members charged with being Communists or sympathizers were expelled. In turn, the leftist U.E. revoked the charter of the Bridgeport local. The union international cited a union ban against any discrimination for political beliefs held by members.

Both sides took the fight into the courts. The international sought injunctive action to prevent local officers from representing workers in negotiations with General Electric. Local officers asked the court to bar revocation of its charter, and to restrain international union interference with the local internal affairs.

• **Unique Provision**—There is one big reason why secession moves in the M.M.S.W. have been successful, so far while troubles have beset moves by U.E.'s Bridgeport local—and other U.E. groups before it (BW-Jun.15'46,p76). The M.M.S.W. constitutional provision permitting locals to withdraw is not a common one; few if any other unions give to their locals such a clear-cut privilege.

• **At Ford, Too**—The Communist issue also took a quick and prominent place in election campaigning at the Detroit Ford Local 600 of the C.I.O.'s United Auto Workers (picture, page 92). Michael Magee, pro-Walter Reuther candidate for local president, is campaigning against the incumbent, Thomas Thompson. Thompson, in the political camp of former U.A.W. President R. J. Thomas, frequently lines up with the leftists in U.A.W.'s heated factional feuds (BW-Feb.15'47,p90). Voting in the 60,000-member Ford local—largest in the world—will continue most of the month.

In a warmup election, the east side tool and die Local 155 renamed its president, John Anderson. But Reutherites could claim a victory, since final tabulations gave the right-wing six executive jobs and five board memberships, while the left eked out only two executive jobs and two board memberships. The local has 8,900 members; 3,700 voted in the election after a bitter campaign.

The gains at Local 155 heartened the right-wing bloc after a series of minor setbacks. However, the important test is being held at Ford. With the Reuther-Thomas feud now near the breaking point, an upset of the left-wing leadership there will be of the greatest significance.

## Trap at Swapping

NLRB won't interfere in bargaining relations at plants with two-year union contracts. New policy aids stability.

Organized labor's main structure has largely been built. Some 14 million wage earners carry membership cards. Unions spread across the entire face of American industry. Labor leaders currently are less concerned with their old problem—to organize the unorganized—with a new one. That is to hold their members against raiding operations of rivals; to consolidate their jurisdiction in an industrial field through striking on others.

**Costly Crossfire**—The result is a growing danger to industry from jurisdictional disputes (page 91). Under present labor laws, management caught in the crossfires of union raiding actions is virtually helpless. And union competition can be just as disruptive to management's business as a high-pressure organizing drive.

The National Labor Relations Board recognized this danger last week. It sought to reduce union competitive agitation by ruling that henceforth contracts for two years' duration will be considered "reasonable." No challenge to the jurisdiction of a recognized union will be accepted during the contract period. The object, NLRB said, is more industrial stability.

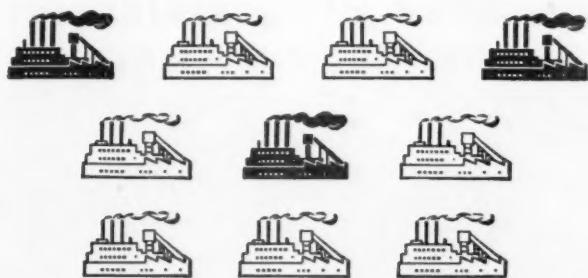
For NLRB, this is not only a change in policy, but a change of philosophy. For the past decade, union organization of industrial workers has been on a trial-and-error basis. Large masses of employees selected collective bargaining agreements for the first time. Often, they came to regret their original choice. National Labor Relations Board policy made it comparatively simple for them to change. Employees were backed in their right to switch unions, if they desired, at reasonable intervals.

Last week NLRB announced that it now considers "this experimental and transitional period" over. In what the board itself termed a precedent-setting decision, NLRB said that henceforth its emphasis will be on stabilizing industrial relations rather than on the freedom of workers to change their union.

**New Policy**—The change in emphasis was first enunciated in a case involving a petition of an outside union for an NLRB election at a plant in which one year of a two-year contract had yet to run. The board turned the petition down. In doing so it made a new statement of policy:

"We think the time has come when stability of industrial relations can be

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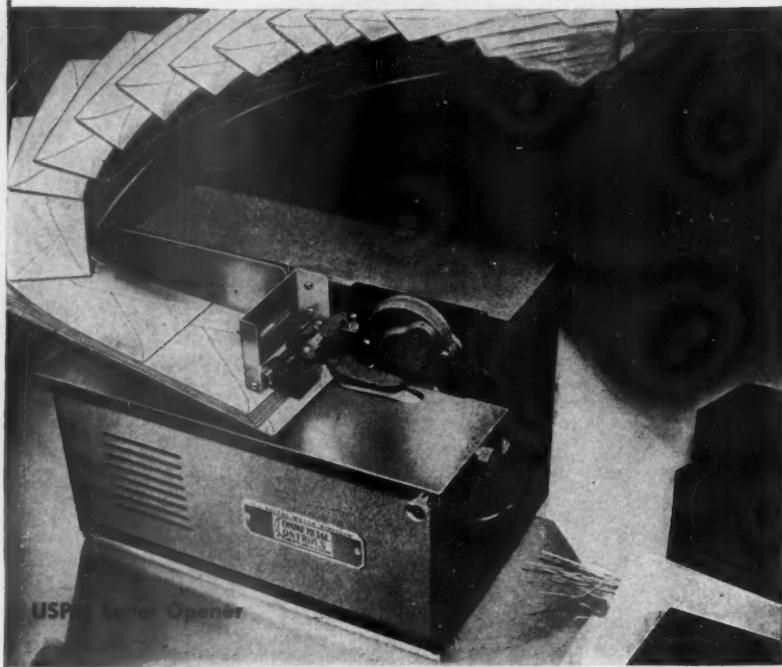
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better served . . . by refusing to interfere with bargaining relations secured by collective bargaining agreements two years' duration."

• **I.A.M. Turned Down**—Principals in the case were the Reed Roller Bit Co. of Houston, the United Steelworkers of America (C.I.O.), and the International Assn. of Machinists. The C.I.O. had a contract to represent 2,000 company employees. In mid-1946, I.A.M. petitioned for an election, although the contract at the Reed plant does not expire until Aug. 30, 1947. I.A.M. contended that the common practice in the industry is one-year agreements and under NLRB rules an election could be held one year before the contract expiration date.

NLRB agreed that the I.A.M. interpretation was correct. But, pointed out, there has been a slow development of new policy since 1946. Initially, contracts for longer than one year did not bar a petition for an election after a one-year period. Later the board ruled that an election would be barred for the duration of a two-year contract if the longer agreement was common industry practice. The new policy as announced by the NLRB completes the cycle.

## 'Tool' Setback

New York Labor Dept. denied charter to Tool Owners Union on basis that it is not a 'union' and 'fascistic organization.'

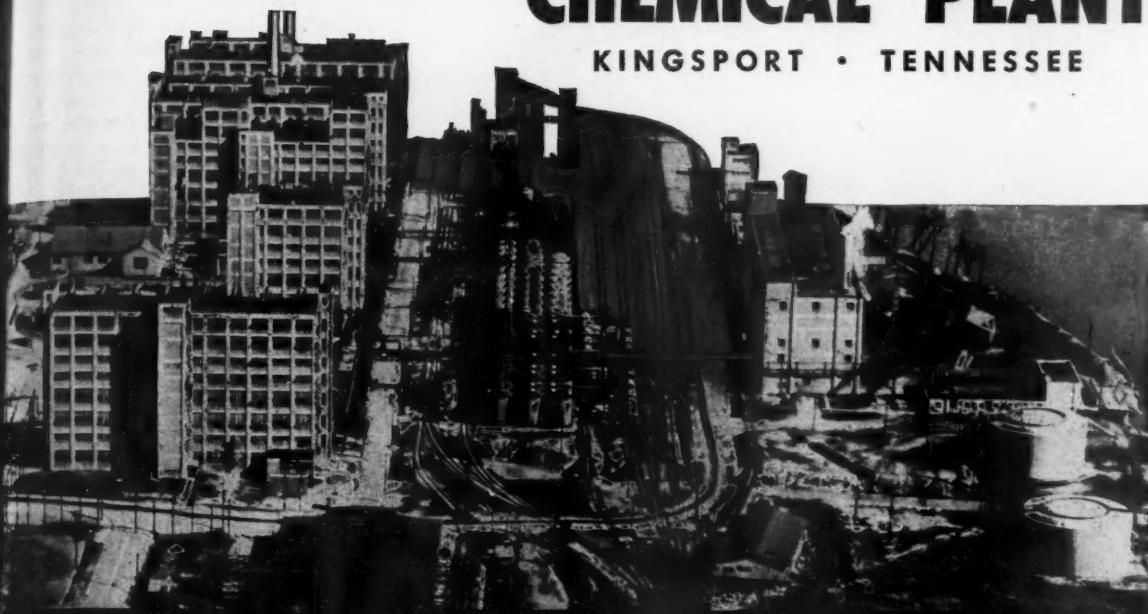
For more than a year, newspaper and magazine editors have invited readers to join—and support financially—a national Tool Owners Union. Founders described the group as a nonprofit organization to mobilize public opinion for preservation of the free enterprise system. They said it was planned to "protect thin people" from "tool users" organized into labor unions.

• **Charter Denied**—Last week New York's State Dept. of Labor turned down a T.O.U. application for a charter to operate in New York State. In doing so the department upheld strong labor contentions that use of the word "union" in the T.O.U. name was misleading, since the group generally was opposed to organized labor.

But the department did not stop at routine denial of a certificate of incorporation to T.O.U. In a strongly worded statement it said T.O.U. was the "most fascistic organization" ever to request approval from the department. It criticized the internal structure and the potential motives of the T.O.U. as dangerous. However, it recognized that the organization might be founded on "la-

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100,000 sq. ft.; Acid Making, 8 floors, 25,000 sq. ft.;  
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92,000 sq. ft. and the other 49,000 sq. ft.;  
Anhydride Refining, 8 floors, 55,000 sq. ft.; Steam  
Plant, 55,300 sq. ft.; and Refrigeration Plant,  
10,000 sq. ft. Remainder of buildings include:  
Office, Laboratory, Storage, Pump House, Maintenance,  
etc. Plant is completely equipped for the  
manufacture of the chemicals mentioned  
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equipment as: catalyst units, precipitators, condensers, coolers, exchangers,

vacuum jets, desuperheaters, refrigeration units,  
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Also included in this offering, for use in place,  
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plant (coal-fired), capacity 970,000 lbs. per hr.  
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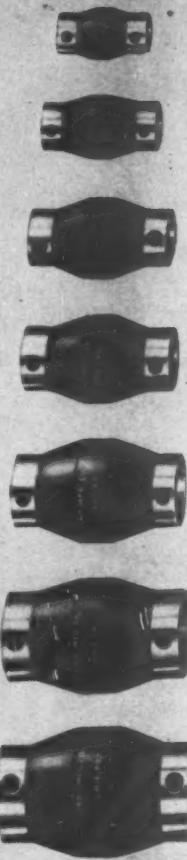
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dable, unselfish, and charitable" principles. T.O.U. plans to appeal.

- Objections—"The incorporators believe that there is something wrong with our country and that they want to do something about it," the decision says. "But they reserve to themselves the means by which the dangers they see in our country are to be vanquished. At the same time, they appeal to the emotion of the great middle class times of stress—to the typist at her machine and the foundry owner harassed with labor trouble—for their blind allegiance to the cause, which appears the same to all, but actually is different."

The decision took particular exception to a T.O.U. bylaw which permits a majority vote of a founders' board to veto any action by a local chapter. The members of this board of five are Al W. Rucker, Lexington (Mass.) advertising man who founded T.O.U., his wife, and Fred H. Nickels, his business partner.

- Delaware Corporation—Rucker got the idea for his "union" in 1944 and mulled it over in his mind until 1945. In that year he tried it out on a local basis in Lexington, later incorporated the organization nationally under Delaware laws. Since then he has been soliciting memberships (at \$5 to \$10 annually) and organizing local chapters.

There have been no reports on progress, but T.O.U. has been able to afford a costly newspaper ad campaign in New York City, Chicago, Boston, Philadelphia, and Baltimore.

Advertising has called for mobilization of "50,000,000 tool owners" to political action. It has urged opposition to the closed shop, and support of strike controls and changes in federal labor laws.

### "Hotel Service" Helps Solve Portal Problem

The Hanna Coal Co.'s operation at St. Clairsville, Ohio, has worked out an answer to its mine portal problem. By relocating its Willow Grove entrance (pictures, page 100), it has cut mine travel time a half-hour daily, and by glamorizing its facilities miners more has been sent soaring. Results: net elimination of travel time, an increase of 300 manhours of production daily, and happier and healthier miners.

- New Entrance—Attention has been focused on mine travel time since the portal-to-portal principle first was set in coal mining (BW—May 12 '45, p. 98). Ordinarily, coal seams are located far from mine portals. Under coal contracts miners must be paid for time spent going from mine entrance to working face. At Willow Grove that has meant 5 miles of travel twice daily, or a loss of more



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Husky, miner-sized steaks are on sale at Willow Grove Mine portal (above) St. Clairsville, Ohio; a passenger elevator cuts travel time to coal sea

than half-hour of daily production per worker.

A \$200,000 improvement program recently opened a new entrance at Willow Grove, 4 mi. closer to the seam. Miners now ride a passenger elevator for 22 seconds, walk through a concrete, electric-lighted corridor, push through a revolving door, and are practically at their job.

• **Roof Garden** Next—A new portal building at the shaft houses what company and miners claim is the country's fanciest mine layout. In it so far are a chrome-furnished restaurant and soda fountain (with waitresses), a lounge for off-duty miners, a 25-shower, tiled washroom and a dressing room that can accommodate the mine's 600 employees at one time, and adequate drinking fountain and toilet facilities. Later, the company plans to finish a dance and recreation room and a roof garden.

**Newspaper Labor Strife  
Brings Reactions**

A newspaper blackout in Springfield, Mass., was ended this week after 144 days. Thin editions of the Springfield Daily News were appearing regularly. But the strike against the Daily News and three other Sherman Bowles newspapers in the city continued unabated.

• **Background**—Members of three A.F.L. mechanical department unions struck against the four newspapers Sept. 27 in a wage dispute. When Bowles announced the "economy" discharge of editorial personnel, the American Newspaper Guild (C.I.O.) joined pickets Nov. 7. A.N.G. then made its own new demands.

Two weeks ago, pressmen and stereotypers settled their dispute, but refused to pass the typographers' and reporters' picket lines. Bowles ordered the Daily



News to resume publication with strikers. Several editions of the paper came out sporadically. This week paper was on a regular schedule.

The Springfield strike outlasted and more notable 1947 newspaper ups. The Philadelphia Record strike ended in the sale of the J. David St. newspapers in Philadelphia and Camden, N. J. (BW—Feb. 15 '47, p16), after three months. Gannett newspapers in Rochester, N. Y., were shut down 13 weeks by a strike (BW—Aug. 10 '47, p96), but resumed publication Feb. 8.

• **Guild in Business**—Meanwhile, A.N.G. strike against Stern newspaper was at the heart of two new developments this week.

(1) The guild began publishing new daily in Camden, left without paper by the Stern suspension.

(2) In Norristown, Pa., the Times Herald unit of A.N.G. announced withdrawal from the guild to form an independent local. The group said its action was influenced by dissatisfaction of A.N.G. strike policies in Philadelphia.

# INTERNATIONAL OUTLOOK

BUSINESS WEEK  
MARCH 8, 1947



Business around the world will be profoundly affected by foreign policy decisions which Washington is forced to make in the next few months (page 5).

With almost no warning, London has called on Washington to take over its economic and military obligations in Greece—beginning Apr. 1.

Involved are a police force of 10,000 British troops and financial commitments which have cost London an estimated \$125 million since V-E Day and which are calculated to run to at least \$350 million over the next three years.

Involved also is the obligation—felt equally in Washington and London—of maintaining Greece as a bulwark against the spread of Soviet influence into the Mediterranean.

Not to be overlooked also is the Russian threat to commercial lifelines stretching through the Mediterranean to the rich oil fields of the Middle East. Both Britons and Americans now have an enormous stake there.

Observers familiar with the Near East know that this commitment can't stop with Greece.

Key to the eastern Mediterranean is Turkey.

Allied strategists demanded, at the end of the war, that Greece be left outside the Soviet orbit in Eastern Europe because it is an essential base for the protection of Turkey—and of the Dardanelles if they are ever threatened by the U. S. S. R.

Washington, if it accepts London's appeal to become the guardian for Greece, will be forced soon to spread that responsibility to Turkey.

When this comes—as it almost inevitably will despite the current coolness of the present Congress—the U. S. will be a major Mediterranean power.

The line of thinking which London believes will make even an economy-minded Congress accept this expensive challenge runs something like this:

If the British pull out and no other power takes over, the local Communist Party will gain control of Greece.

That would mean Russian domination of Greece and the development of a two-way push on Turkey (from the west as well as the east). Thus enveloped, Turkey would be forced to yield to Russian demands.

Then, with the Dardanelles in their control, and Greece as an added base, the Russians would quickly move into Italy, which is already teetering on the edge of Communism.

From there all of Western Europe would be exposed to Communist political drives.

The problem for Congress, however, reaches far beyond the issue of Greece and the Mediterranean.

What faces Washington is the whole question of whether this country is going to accept the responsibility for policing much of the world—a job which Britain has largely handled until now.

If we accept, business will be affected in two important respects:

(1) Policing costs—big naval and air forces, small military establishments in all our outposts—will be an added factor in holding the budget and taxes at much higher levels than now planned.

(2) Commercial operations connected with the job, on the other hand,

# INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK  
MARCH 8, 1947

will give U. S. business—banks, insurance companies, shipping lines, foreign traders—some of the advantages heretofore enjoyed by Britain.

Britain's home problems continue to upset long-term business thinking.

Despite encouraging statements by London officials, there is little prospect now that the British will be able to unblock much backed up sterling beginning July 15, despite the proposals in the U. S. loan agreement.

It is more likely that Britain will by then be earning only enough dollars from current sales to the U. S. to put current business on a free exchange basis.

This means that the \$12 billion or \$14 billion of blocked sterling in London will be frozen until Britain is able to improve its financial position.

In the case of India, where more than \$5 billion sterling is frozen, this will slow industrialization plans; much of the required equipment can be bought only in the U. S.

Settlement of the political battle between Wall Street and Washington (page 17) means that the World Bank can begin functioning and possibly prevent a crisis.

London is not likely to ask for a loan at once, but if dollar credits are made available to France, Holland, Denmark, and Czechoslovakia, it would mean that these countries could pay in dollars for British goods.

This, in turn, would help London to meet its obligations in the U. S.

New patterns in business:

(1) In Bolivia, Dr. Mauricio Hochschild, one of the country's three largest tin producers, has adopted a U. S. formula by establishing a scholarship plan to send three graduate students from Latin American universities to the U. S. each year.

Bolivia, Chile, and Peru will be represented in the first group of students due to arrive at the American University in Washington next fall.

(2) The Ericsson Telephone Co. (Sweden), already an important factor in the telephone business in Mexico, is about to establish a plastics plant near Mexico City.

Planned to operate on waste wood, the plant will cost about \$2 million, and Mexican investors will put up more than half of the capital.

Czechoslovakia continues to lead Eastern Europe in the development of trade deals around the world since the war (page 105).

Latest contract is with Turkey where the Czechs will supply 1,100 freight cars at a reported cost of nearly \$12 million.

Still pending is a supplemental Turkish order for 2,050 freight and 50 passenger cars.

Western Europe is slowly developing new trade deals which will help to alleviate local shortages.

Belgium has just agreed to deliver 92,000 tons of steel to Britain this year. This is a 50% increase from 1946 and will help slightly in meeting the shortage in deliveries from the U. S.

Poland will increase its shipments of food products and industrial raw materials to Britain as a result of negotiations now under way.

British consumers will get \$14 million of French rayon piece goods this year to help meet local shortages in special lines.

# BUSINESS ABROAD

## The Czech Compromise

**Caught between pressures from Soviet Union and the West, Czechoslovakia tries moderate socialism. Nationalized industries are being run on democratic, not communist, principles.**

Czechoslovakia is the proving ground for moderate socialism in Eastern Europe. Although it might have become a satellite in a contest of power between the U.S.S.R. and the democratic West, it instead became a bridge. And, it has yet set the example for other Eastern European states.

**The Lion and the Lamb**—Everywhere in Czechoslovakia there are signs of an attempt to combine the aims of the hot-headed left and the not-so-conservative right.

Though there has been sweeping nationalization, compensation is offered. Culture is not to be collectivized. Cooperatives are not affected by nationalization decrees. Neither is retail trade. Agriculture seems determined to prove an economy half-planned and half-free can prosper and expand.

**The Plan**—Hand in hand with nationalization, and likely to be the measure of success, came the Czech Two-Year Plan. The over-all goal is national production about 10% above 1938 by the end of 1948.

Food production goals include an expansion over 1946 output of 35% for meat, 100% for pork, 10% for butter, 10% for milk, and 50% for eggs.

Coal production in 1948 is to be 16,000 metric tons, equal to 1937 output. Brown coal production of 23,000 tons will be 33% above prewar. The calls for 1,400,000 tons of pig iron and 2,200,000 tons of steel. Power output of 7,400,000,000 kwh. is slated.

In the industrial side, the plan calls for 15,000 freight cars a year (1946 output was 10,000); 290 locomotives (70 built in 1937); 10,000 trucks (compared with 3,300 prewar); 9,000 tractors (compared with 600); and agricultural machinery worth \$550,000,000 a year.

**Careful Study**—The two-year plan, which will cost an estimated \$1,200,000 over-all, was not drafted in a vacuum. It was first worked out by six committees on which 200 government, business, and independent experts served.

When the outline was prepared it was shown to industry associations. In consultation with individual firms (both national and private), detailed production goals, time-limits, investment programs, import and export requirements, and dis-

tribution schemes were worked out. This plan was returned to government where conflicts were ironed out. The legislature then approved the Two-Year Plan law.

• **An Old Story**—Nationalization of industry developed even less spectacularly and arbitrarily.

As early as 1920, factory Works Councils were given consultative powers in Czech industry. It was no surprise, then, that while the Czech government in exile planned as early as 1943 to take over certain industries, workers at home

were preparing to run the industries when the country was liberated. The Works Councils were operating many factories when Allied armies arrived. The Nationalization Decree of Oct. 24, 1945, legalized and extended this trend and established uniform rules.

• **Corporation Status**—Nationalized industries are national corporations with the status of independent legal persons. They are subject to the same regulations that affect private firms, pay the same taxes, and must submit their accounts for public auditing.

The state does not guarantee the obligations of the nationalized firms but receives their profits as income. Appointed directors are not public servants but are responsible to an elected tripartite board, selected by the unions, government, and industry associations. Directors may be fired for inefficiency.

• **Labor's Place**—Czech labor is guaranteed new and greater responsibilities. Factory Works Councils, elected by direct secret ballot, are mandatory in all plants, nationalized or private. These councils are not permitted to interfere



A \$20 million loan enabled Czechs to buy U.S. cotton. Now with their finished textiles they seek more American dollars to keep the trade cycle moving.



Although Czechoslovakia's oil business is nationalized, Socony-Vacuum still supplies the oil for Czech needs.

with management, but serve with management on joint committees.

The councils are not just concerned with wages and conditions of work, but must be kept informed of plant profits and production. They receive 10% of net profits for educational and cultural activities.

Czech unions, organized by industries rather than by crafts, include some 2,000,000 workers. The unions share with the Works Councils in responsibility for maintaining production. They have their own theaters, resorts, and libraries, and conduct educational campaigns for the purpose of improving worker efficiency.

• **Extent—**Nationalized industry is organized in eleven groups covering mines, iron foundries, chemicals, glass, building materials and ceramics, textiles, paper, leather and rubber products, wood working, gas and electricity, and machinery. As a rule it can safely be said that no plant with less than 150 employees has been nationalized and that few with more than 500 have not been affected.

About 65% of Czech industry is nationalized. The proportion ranges from 100% of the rubber industry (four plants) to the building industry, in which the 26 nationalized firms employ only 4% of the workers.

The test of Czech planning and of nationalized industry is production. The giant Bata shoe factory at Zlin, for instance, ran heavily in the red in the first months of national operation. It is now solidly in the black. By and large, optimistic Czechs think nationalization will work. Production in the first month of the Two-Year Plan topped the target by nearly 5%.

• **Trade Increasing—**Czech foreign trade is staggering back to normal. Like most

European countries, Czechoslovakia is plagued with exchange problems and material shortages. The result is controlled trade and finance. Prague has signed more than 20 bilateral trade pacts.

At the turn of the year it was estimated that the prewar (1937) volume of exports may be reached in May, but that prewar level of imports will not be reached until next year, at the current rate of increase. Principal trading partners of Czechoslovakia are Switzerland and the Soviet Union. Before the war Germany was the chief customer and supplier.

• **Trade Pattern—**During the year ended last October, leading countries trading with Prague, and the percent of trade handled were as follows:

	Czech Imports	Czech Exports
Switzerland .....	11 1/2%	17%
Soviet Union .....	12 1/2	13
Sweden .....	10	8
Hungary .....	8	*
Great Britain .....	7	*
United States .....	6	8
Germany .....	5	8
Austria .....	5	5 1/2
Others .....	35	40 1/2

\* Less than 4%, included with (others).

Czechoslovakia has adhered to the trading principles outlined by the United States in the proposed charter of the International Trade Organization. At the same time, however, Prague announced that it would be compelled to maintain exchange and trade controls for some time to come.

• **Aid From Abroad—**Financial assistance has been rendered by the British government (\$30 million), British banks (\$4 million), Canada (\$19 million), Sweden (\$6 million), Brazil (\$20 million), and the United States (\$20 million for cotton, \$2 million for tobacco, and \$50 million for army surplus purchases). A U. S. Export-Import Bank loan is pending and Czechoslovakia has asked for \$350 million from the International Bank for Reconstruction & Development.

Politically and economically, Czechoslovakia is probably the most stable entity in central and Eastern Europe. Its experiment in compromise will be watched by both the East and the West. Many western observers hope that the experiment works. They would like to see its moderation imitated in the leftward-trending states bordering the U.S.S.R.

### CLOTH FOR INDIA

BOMBAY—Cloth-starved India has both good and bad news.

Latest figures show that September production was off one-third from a year ago.

On the brighter side, the central gov-

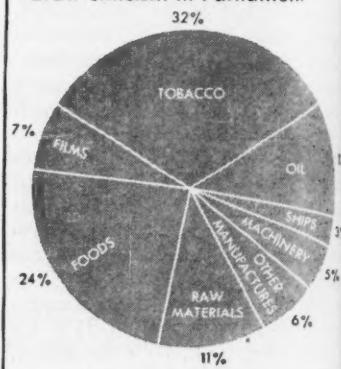
ernment approved a new machine factory. It will be operated by Textile Machinery Makers, Ltd., a British combine.

The factory will be set up by mid-May in the Bombay area. This announcement was made by Krishnaraj Thackeray, chairman of the Textile Control Board and head of the Indian delegation which concluded the agreement. The plant will make 20,000 spindles monthly for three years. Then it will jump to 30,000 a month the fourth year, 40,000 a month the fifth year. It will fulfill India's program to add 2,500,000 spindles in the next five years. It will facilitate the plan to replace some 8,000,000 worn-out spindles with new ones.

The \$4,500,000 operating costs will allot some \$1,200,000 in shares to the British combine. Of this, \$780,000 will be in consideration of patent rights, jigs, tools, and patterns.

### BRITAIN "BUYS U. S.

Purchases in last half of 1946 draw criticism in Parliament



Source: Board of Trade, United Kingdom.

© BUSINESS WEEK

Cold and hungry Britons were in mood to be reasonable when it was revealed that of their expenditures scarce dollars 39% went for American films and tobacco in the last half of 1946. Winston Churchill led the political attack, but economic reason prevailed. If U. S. films were banned some British theaters would close for lack of features. British films would no longer earn dollars in the U. S. Tobacco buying late last year was an unusually high rate. This year purchases are slated at 25% below 1946. This will save precious dollars but it will cost the Exchequer some \$400 million on tobacco imports. Heavier deliveries of U. S. built machines and manufactures this year will reduce the proportion of film and tobacco imports as a part of Britain's buying by the next accounting date.

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derneath lamps, bookends, ashtrays, and lining sideboard drawers and jewelry boxes. Because of its acoustic qualities, it's a fine covering for radio speaker grilles, automobile glove compartments . . .

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## Seafood Aid

Fishing industry eagerly eyes U. S.-designed mechanical fish-filleting which saves time and labor, increases output.

Bug-eyed British trawlers in the ancient fishing port of Hull are watching assembly of a remarkable Yankee-built machine—a 4½-ton automatic device for fish filleting. It bids fair to revolutionize the seafood industry of Britain and elsewhere.

In the United States, Atlantic Coast Fisheries Co., with home offices in Boston, announced that American Machine & Foundry Co., Brooklyn, is making four big machines and 26 smaller units of filleting equipment.

The small filleting machines will be licensed to major operating companies in the U. S. The big machine is not destined for use by Atlantic Coast's competitors at home, but will be made available abroad.

- **What It Does**—The machine being assembled in Hull:
- Cost over \$1 million to design and involved 23 years of research;
- Replaces hand-filleting, thus saving labor;
- Increases the yield per fish 15% to 18%;
- Improves the appearance of the product and makes for greater sanitation; and
- Handles 1- to 10-lb. cod or haddock at the rate of 45 a minute (or about 15,000,000 lb. annually).

• **Prospective Buyers**—Atlantic Coast Fisheries technicians are preparing to demonstrate the machine to British experts as well as to eager prospective customers from some ten other European countries.

The firm has two other filleting machines—one designed for rosefish and the other for scrod and whiting. The whiting machine fillets 100 fish per minute ranging from ½ to 2 lb. The rosefish machine cuts 75 fish a minute handling sizes from ½ to 2½ lb.

Right now Atlantic Coast Fisheries Co. has one haddock machine in its Boston plant, where it has been operating without publicity since 1942.

• **Proof Before Purchase**—The Hull Ice Co., acting for Hull Trawler Owners Assn., Ltd., operators of 200 trawlers, wants twelve of the big filleting machines. Before it will release dollars for closing the deal, however, the Ministry of Finance has to be shown the machine's value.

Hull trawlers land a billion pounds of fish a year. With twelve machines nearly a quarter of the catch could be filleted. Atlantic Coast's tests show an

18% saving with the machine. Therefore it guarantees a 10% saving to the British company. This is calculated net a minimum of \$3 million a year for the twelve machines.

Canny British fishermen see in the machine a chance to beat some of the tough breaks in the industry. If they haul too many fish and the price breaks, they'll fillet and freeze for slimmer time and higher prices.

• **Others Interested**—Norway wants to secure a machine for one of its factories.

The Soviet Union wants Atlantic Coast to set up a super industry at Murmansk.

In addition to Canada, Newfoundland, and Britain, buyers from South Africa, Denmark, Spain, Portugal, Sweden, and Iceland are dickering for machines.

The company hopes to give each of these hopefuls one machine from earliest output, before any one country gets all it expects to need.

• **The Deal**—After the machine demonstrated its efficiency in Hull, Edward H. Cooley, company president, will go abroad to negotiate sales. The big machines are expected to sell for about a million dollars—either in cash or royalty deals.

Cooley's selling points: (1) They are practically fool-proof; (2) skilled labor is not needed to operate them; (3) three years' operations at Atlantic Coast's plant, lost time on the machine has been only 1.22 hours per 100 hours of operation.

## POWER FOR AUSTRALIA

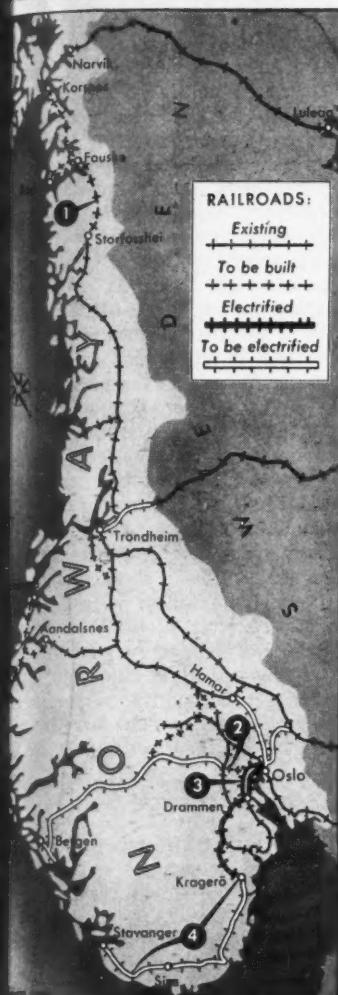
MELBOURNE—The State Electricity Commission has mapped a 10-yr. power expansion program for Victoria. Overall generating capacity will be stepped up from 409,715 kw. to 717,715 kw.

Capacity of the 175,000-kw. Yallourn thermal station (brown coal) will be expanded 75% to 300,000 kw. Tenders are now being called to replace two of six 12,500-kw. turbines with 50,000-kw. units.

The plan also provides for installation of an additional 60,000 kw. at Newburn C thermal station, now rated 138,000 kw.

The balance of newly developed power will come from hydro schemes. Construction of the main storage reservoirs of the Kiewa hydroelectric project is now completed. There will be four power stations: No. 1 (21,000 kw.) at an elevation of 4,000 ft.; No. 2 (33,000 kw.) at 3,700 ft.; No. 3, now completed, of 24,000 kw., at an elevation of 1,900 ft.; and No. 4 (39,000 kw.), under construction. The fourth unit secures the unit of power from the water before discharge at the 1,200-ft. level into the river near Tawonga.

## NORWAY PLANS BETTER TRANSPORT



ector Sundt of the Norwegian Ry. has announced a \$50 million 15-yr. modernization plan. In the '48 national budget more than \$100 million is earmarked (1) to complete the line begun by the Germans from Storfosshei to Korsnes; (2) to build a cut-off on the Oslo-Berline line that will save 27 mi. but in building a 61-mi. tunnel; (3) to lay a double-track line between Oslo and Drammen and broad-gage south of Drammen; and (4) to electrify a major part of the Southwest line between Kragero and Stavanger. The line is electrified from Oslo to Kragero. Long-range plans involve electrifying major lines and laying several cross-connections. It is estimated that 87% of the materials and equipment can be obtained from Norwegian manufacturers.

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CHARLES C. MOSKOWITZ,  
Vice President & Treasurer

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# THE MARKETS

(FINANCE SECTION—PAGE

## Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial	149.0	149.2	152.8	165.3
Railroad	46.3	47.0	49.0	62.2
Utility	78.9	80.1	80.9	87.4
Bonds				
Industrial	123.7	123.7	123.5	124.4
Railroad	114.1	114.0	114.6	119.6
Utility	111.9	112.2	113.0	116.0

Data: Standard & Poor's Corp.

## Stocks Pepless, But Firmer

Up to the middle of this week New York Stock Exchange trading sessions had no return visit of the late-February series of sudden, but damaging, flurries of price weakness. But activity on Wednesday uncovered the strongest rallying tendencies for some days.

• **Trading Drops**—Except for these factors, however, those Wall Street bulls who have been feverishly engaged up to recently in trying to "talk up" a new bull market had little to crow about.

This week, for example, Big Board trading activity sank near its lowest 1947 levels. And even the financial district's most bullish segments were willing to admit that trading still was dominated by professional elements.

• **Reasons**—The public continued to stay away from stock market proceedings—despite the recent flood of favorable 1946 earnings reports. This isn't hard to explain, however.

Investors realize, for example, that at around 180 for the Dow-Jones in-

dustrial stock index, prices are at historic plateau. During a climb, it been higher on only a few other occasions: 1927 to 1929, 1936 to 1937, 1945 to 1946. And most erstwhile market participants now on the side can remember what happened to prices in the years that followed those occasions. Most of today's temporary investors and traders will agree that present prices probably are based on the basis of 1946 profits, perhaps even on the first-half outlook 1947. But they have their doubts about the size of subsequent earnings.

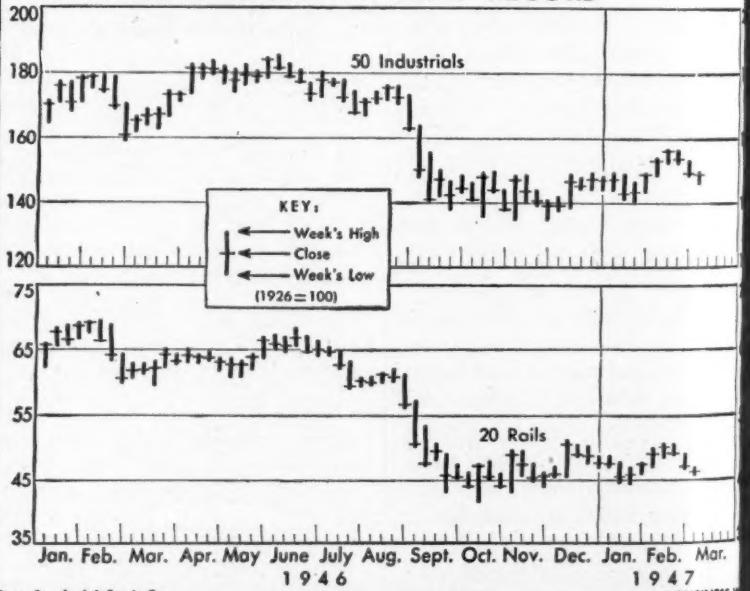
• **Price Worries**—What is causing these doubts? There are fears aroused by certain aspects of the labor, foreign, commodity-price situations. A particular worry now concerns the possible undesirable effects that recent skyrocketing commodity prices may have on many new wage contracts soon to be negotiated. And there are fears another commodity price bust may be in the making (page 15).

Today's sideline sitters are going to require some pretty convincing assurance that their present fears are groundless before they become active again.

## Cotton Exchange Settles

Any earlier Street beliefs that it the labor movement within its ranks effectively bottled up were rudely shattered this week. Tuesday saw trade on the New York Cotton Exch-

## COMMON STOCKS—A WEEKLY RECORD



ruptly stopped by a strike. It had been called by the United Financial Employees (A.F.L.) when its contract expired without being renewed on the basis demanded (BW-Dec. 14 '46, p83). The dispute was settled in time to permit resumption of trading Wednes-

day. In the mediation that preceded settlement, however, the exchange had to agree to a union shop; a 40-hour, five-day week; 14% to 20% wage increases; a profit-sharing plan based on trading activity; and a voluntary checkoff of dues.

## The 1946-4? Bear Market Record

By the first week of February, stocks had managed to win back about 30% of their bear market losses, measured by Standard & Poor's various weekly stock price indexes. As many as 29 of those individual yardsticks had recovered from 30% to almost 53%; only 19 failed to show at least a 20% comeback.

Subsequent weeks, however, have wrought a considerable change, as disclosed in the compilation below. Because of occasional selling flurries, only 14 of the indexes now reveal above-30% gains. The number showing under-20% advances has risen to 30, and the over-all rise has dropped to only 17.9%.

Group Index	1946 High	% Drop Bear Market	% Drop From 1946 Low	% of Bear Market Loss Recovered
Soaps & vegetable oils	149.1	118.9	20.3	54.3
Containers	116.2	87.5	24.7	43.2
Paper	328.6	241.0	26.6	42.2
Soft drinks & confectionery	165.2	116.7	23.3	41.4
Baking & milling	177.0	144.2	18.5	40.9
Roofing	179.7	132.8	26.1	39.2
Mining & smelting	113.0	79.4	29.7	35.1
Utility holding companies	160.0	99.4	37.9	33.5
Automobiles	166.0	98.9	40.4	33.2
Auto parts & accessories	170.2	106.7	37.3	32.1
Chemicals	151.8	115.3	24.0	32.1
Metal fabricating	178.2	114.1	19.1	32.0
\$1, 10¢, \$1 chain stores	156.9	116.0	21.7	31.8
Copper	147.1	103.7	29.5	31.3
Railroad equipment	153.5	105.5	31.3	28.9
Utility operating companies	132.6	107.1	19.2	28.6
Cement	204.6	142.3	30.4	27.2
Meat packing	203.0	150.6	25.8	26.0
Finance companies	113.1	81.2	27.5	25.7
"Capital goods" shares	147.0	107.9	27.3	25.5
Agricultural machinery	160.5	107.3	33.1	24.7
Steel	159.5	118.9	25.5	22.9
Leather	221.9	113.8	48.7	21.8
Telegraph & telephone	129.1	103.4	19.9	21.8
Tires & rubber	307.4	207.1	32.6	20.6
Utility stock index	132.3	104.0	21.4	20.1
Tobacco products	105.1	82.8	21.2	19.7
Industrial stock index	163.2	121.1	25.8	18.1
Weekly composite index	158.6	117.8	25.7	17.9
Electrical equipment	133.3	87.0	34.3	17.5
Gold mining (U. S.)	106.8	62.9	41.1	17.5
Shoes	144.7	104.3	27.9	17.5
Household furnishings	222.5	144.8	34.9	17.4
"Consumer goods" shares	175.8	127.0	27.7	17.0
Industrial machinery	154.6	107.8	30.3	16.9
Shipping	459.7	339.1	26.2	16.3
Dairy products	250.1	175.9	29.7	15.1
Railroad stock index	168.8	104.0	38.4	14.8
Office & business equipment	165.1	127.7	29.3	13.9
Fertilizers	305.4	213.0	30.3	13.5
Textiles & apparel	312.0	206.1	33.9	12.1
Sugar	148.6	109.3	26.4	11.7
Lead & zinc	139.7	104.7	25.1	10.6
Air transport	593.1	268.1	54.8	9.1
Printing & publishing	285.5	149.7	47.2	8.6
Mail-order companies	241.1	173.6	28.0	7.1
Shipbuilding	244.7	156.2	36.2	6.3
Department stores	345.8	195.1	43.6	6.0
Coal	230.7	172.0	25.5	5.3
Motion pictures	350.3	208.5	40.5	5.3
Aircraft manufacturing	183.1	102.9	43.8	4.6
Alcoholic beverages	581.6	309.5	46.8	4.4
Oil	169.8	137.3	19.1	3.1
Food chains	248.6	173.3	30.3	1.6
Radio	224.1	117.7	47.4	1.5
Drugs & cosmetics	183.4	134.1	26.9	1.1

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# THE TREND

## GERMAN REPARATIONS MUDDLE

The problem of German reparations is one of the toughest that Gen. Marshall must face when he sits down with the Russians at Moscow next week. The Russians already have made their stand pretty clear. They want \$10 billion of reparations out of current German production. And they apparently hope to get these in exchange for a specific agreement whereby they join the West in reconstructing Germany as an economic unit.

Even though we long have argued that the U.S. should continue to strive for the economic unification of Germany (BW—Jun. 29 '46, p116), a bargain of the type the Russians have in mind is not satisfactory. For if Germany is to live within the borders fixed for it at Potsdam, it cannot pay reparations out of current production, unless the United States agrees to give it the necessary raw materials. And no one in this country will support a scheme that requires us, in effect, to pay a good share of the German reparations bill.

• **The U. S. already is** in the paradoxical position of contributing large sums to support the enemy it has helped to vanquish. Any lingering doubts that such a course was necessary were firmly dispelled by the report of Herbert Hoover. The plan for making the U. S.-British zone in Germany self-supporting calls for zonal imports of \$2,850,000,000 and exports of \$1,850,000,000 between now and 1950. This scheme has been interpreted as meaning that the U. S. makes up half of the \$1 billion trade deficit, and then walks off with the comfortable feeling that comes of one part of a job well done. Unfortunately the German muddle is not quite so simple.

Those concerned with Military Government in Germany figure that about three-fifths of the \$2,850,000,000 of German imports must be paid for in dollars. The U. S. is the sole source for many of the necessary foodstuffs and raw materials. In other cases, countries furnishing goods to Germany will demand payment in dollars.

• **Where can Germany get** these dollars—some \$1,700,000,000 between now and 1950? The U. S. presumably will give it \$500 million. Moreover, the British probably will be called upon to provide dollars to cover their \$500 million share of the German trade deficit, which means they must allocate this sum out of the funds the U. S. has lent them. And the remaining \$700 million must be raised by the Germans through sale of their own goods to this country.

This complex situation is bad enough as it stands. But the Russian reparation deal would make it a lot worse. For it would greatly increase Germany's need for raw material imports and do very little to expand exports. Thus the gap between exports and imports will have been widened into a mighty chasm, with only the U. S. able

to bridge it. For the Russians rule themselves out as the source of the additional raw material imports that would be needed to produce the reparations goods.

The impossibility of getting reparations out of current German production was recognized at Potsdam. The Russians agreed then to take their reparations in the form of capital equipment that already existed. The only reason they haven't received the equipment promised them is that they failed to live up to their own end of the Potsdam bargain.

• **Largely for political reasons,** the Russians steadfastly refused to cooperate in treating Germany as an economic unit. They now are facing up to the failure of their political program, and apparently are willing to consider again the economic unification of Germany. But we are at a loss to understand why the Russians should now believe this country might agree to a reparations scheme under which the U. S. pays much of the bill, in order to get Russia to go through with a bargain it has ducked for 20 months.

There is one possible change in the Potsdam agreement, however, which might justify a partial revision of the German reparation terms. That change is the recasting of Germany's eastern boundary so as to return to it the rich agricultural areas ceded to Poland.

The agricultural areas in the provinces of Brandenburg and Pomerania made up one of Germany's principal breadbaskets. Indeed, this was the only area in Germany that produced more than it ate. Flour, potatoes, milk and sugar flowed from it to Berlin and Western Germany. And these regions shipped back steel, wood, fertilizers, and various manufactures in return.

Poland doesn't need these rich agricultural areas; Germany needs them desperately. It is the wealthy coal and industrial areas of upper Silesia that Poland can really use, and these Poland would retain.

The return to Germany of these farm areas would cut its food deficit in half and thereby chop a large chunk off its import bill. And the danger of the Reich becoming a source of constant irritation to the economies of the western world would be substantially reduced.

• **If Russia would agree** to such a border readjustment, the U. S. negotiators might well consider the Russian demand for reparations out of current production. Nothing like the \$10 billion the Russians are reported asking could, of course, be granted. But the reduction in food imports may make possible an increased import of raw materials necessary for reparations output. And a mixture of capital equipment from dismantled plants, along with items available from current production, might provide the least expensive compromise for all concerned.

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